

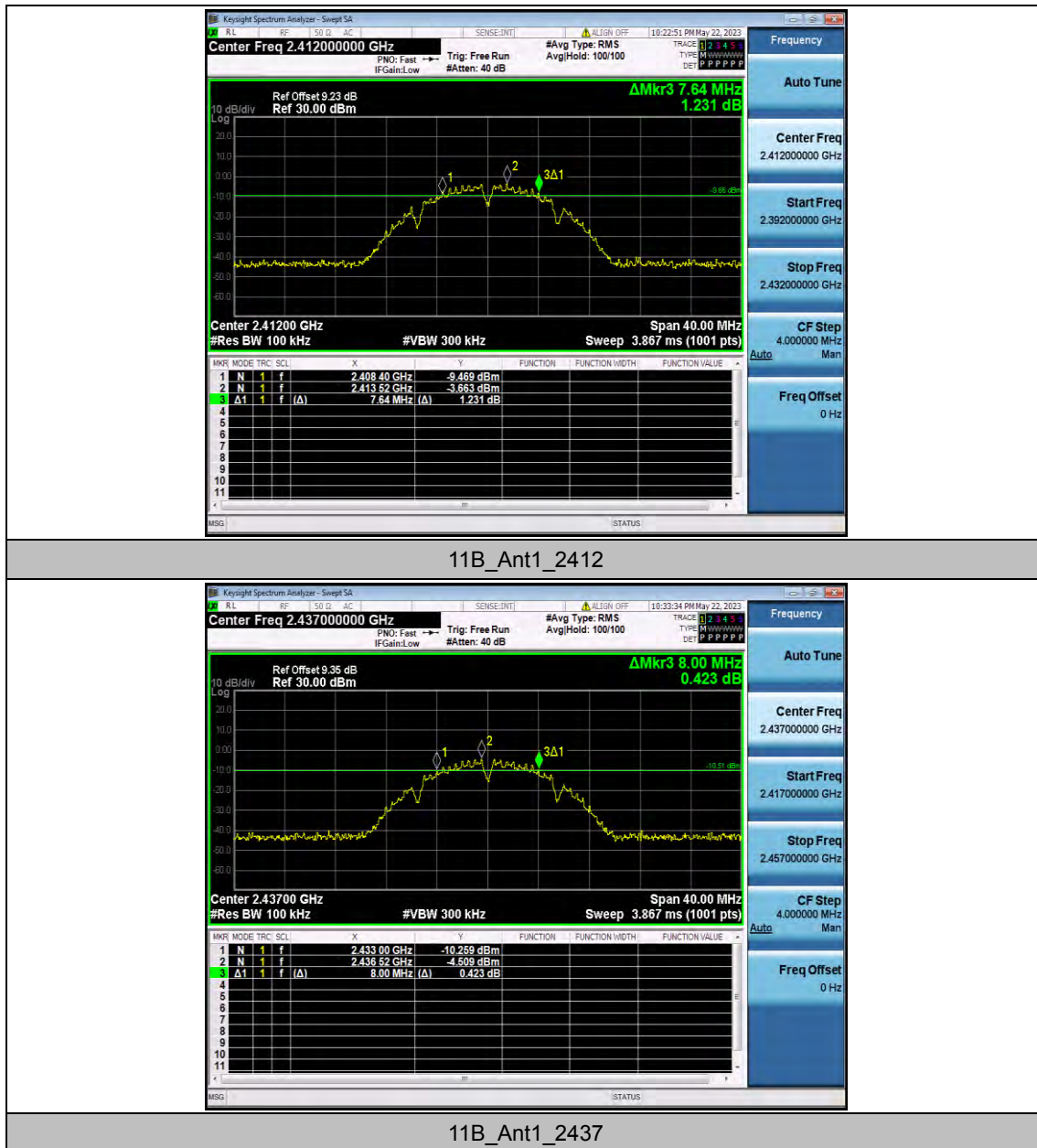
Case No. : <u>GTS20230513006-1-1</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.5.22</u>	Test Engineer: <u>Jenny zeng</u>

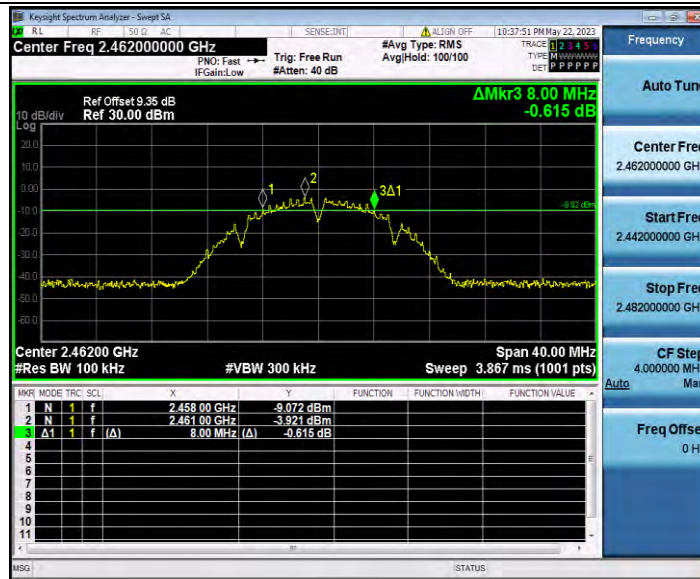
Appendix A.1: DTS Bandwidth

Test Result

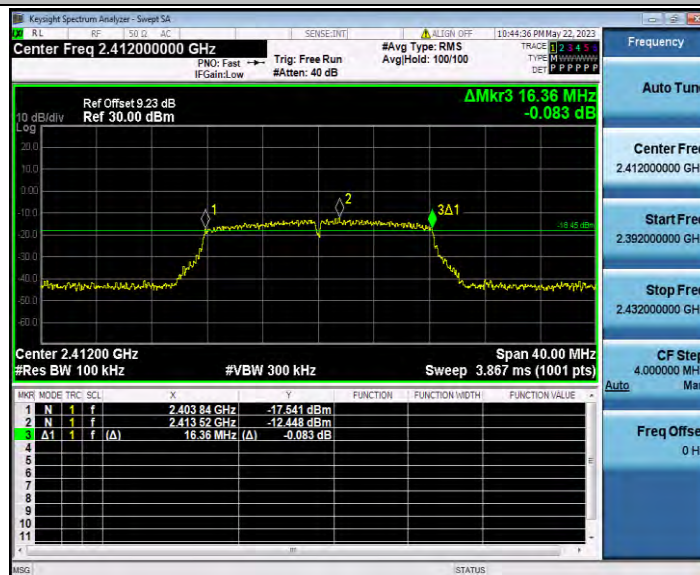
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	7.640	2408.400	2416.040	0.5	PASS
		2437	8.000	2433.000	2441.000	0.5	PASS
		2462	8.000	2458.000	2466.000	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
		2437	16.360	2428.840	2445.200	0.5	PASS
		2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.240	2420.800	0.5	PASS
		2437	17.560	2428.240	2445.800	0.5	PASS
		2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	35.120	2405.120	2440.240	0.5	PASS
		2437	35.280	2419.880	2455.160	0.5	PASS
		2452	36.080	2434.080	2470.160	0.5	PASS

Test Graphs





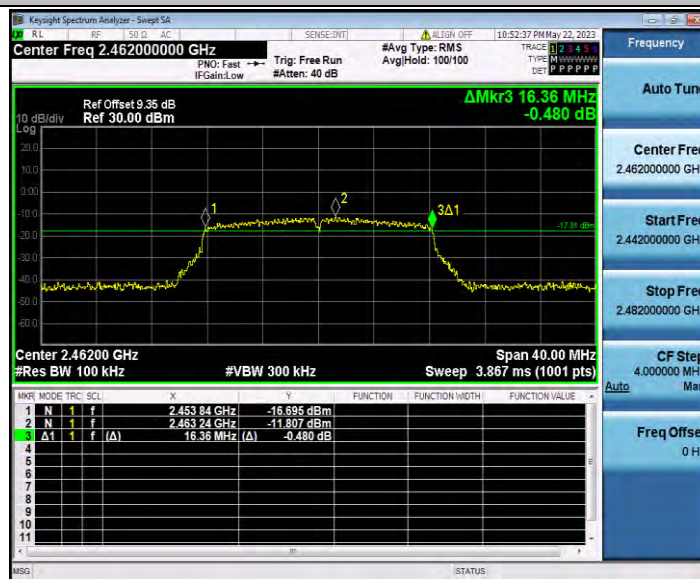
11B_Ant1_2462



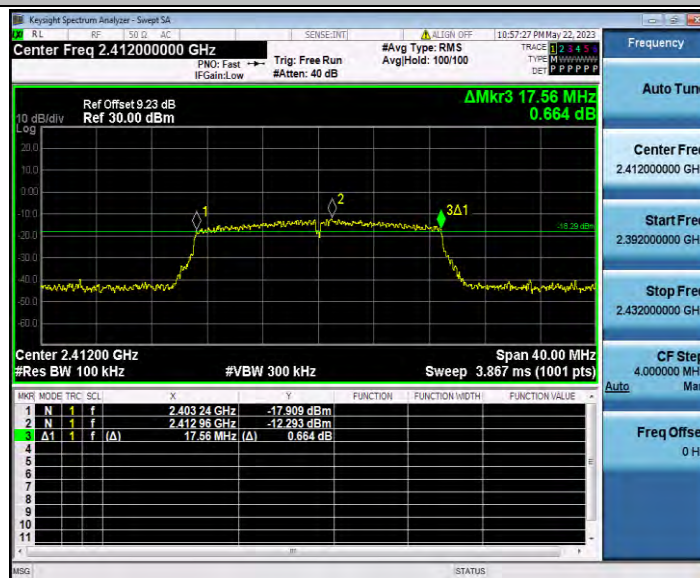
11G_Ant1_2412



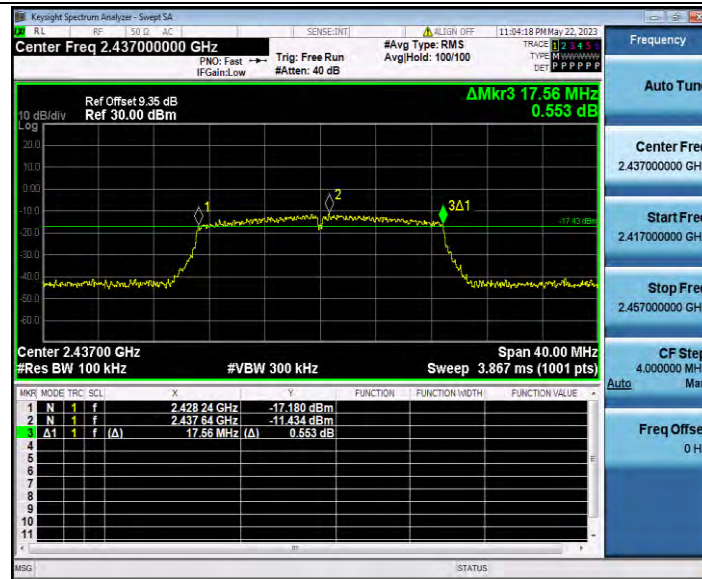
11G_Ant1_2437



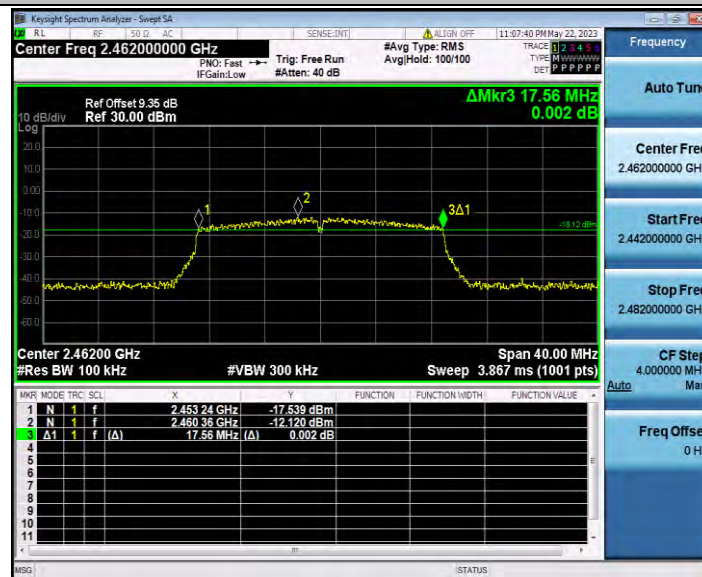
11G_Ant1_2462



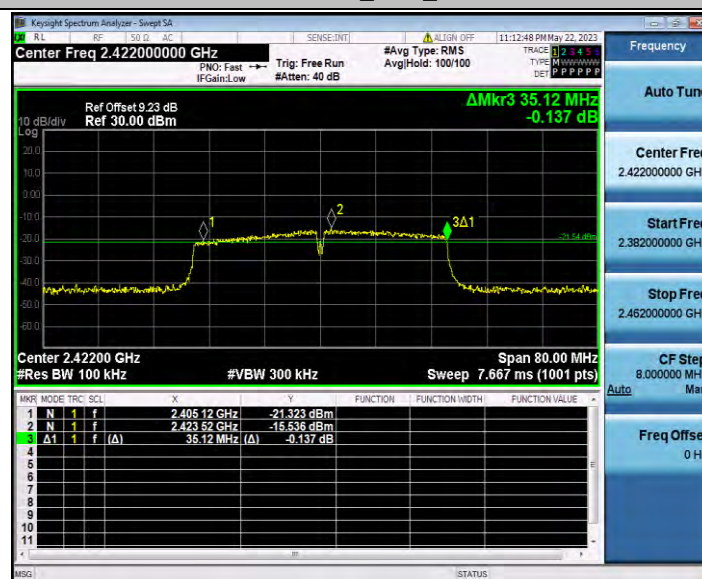
11N20SISO_Ant1_2412



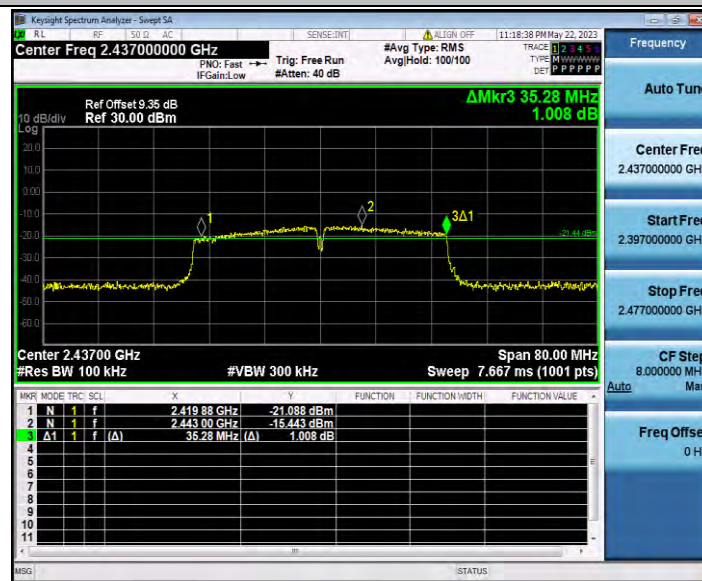
11N20SISO_Ant1_2437



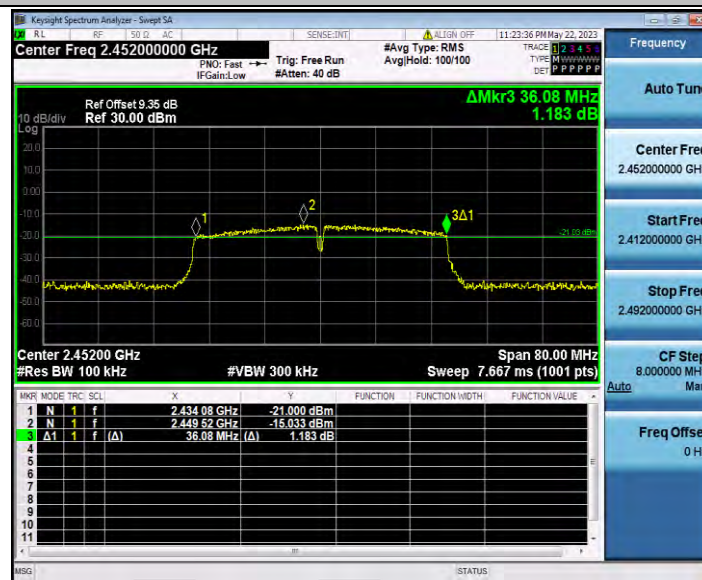
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



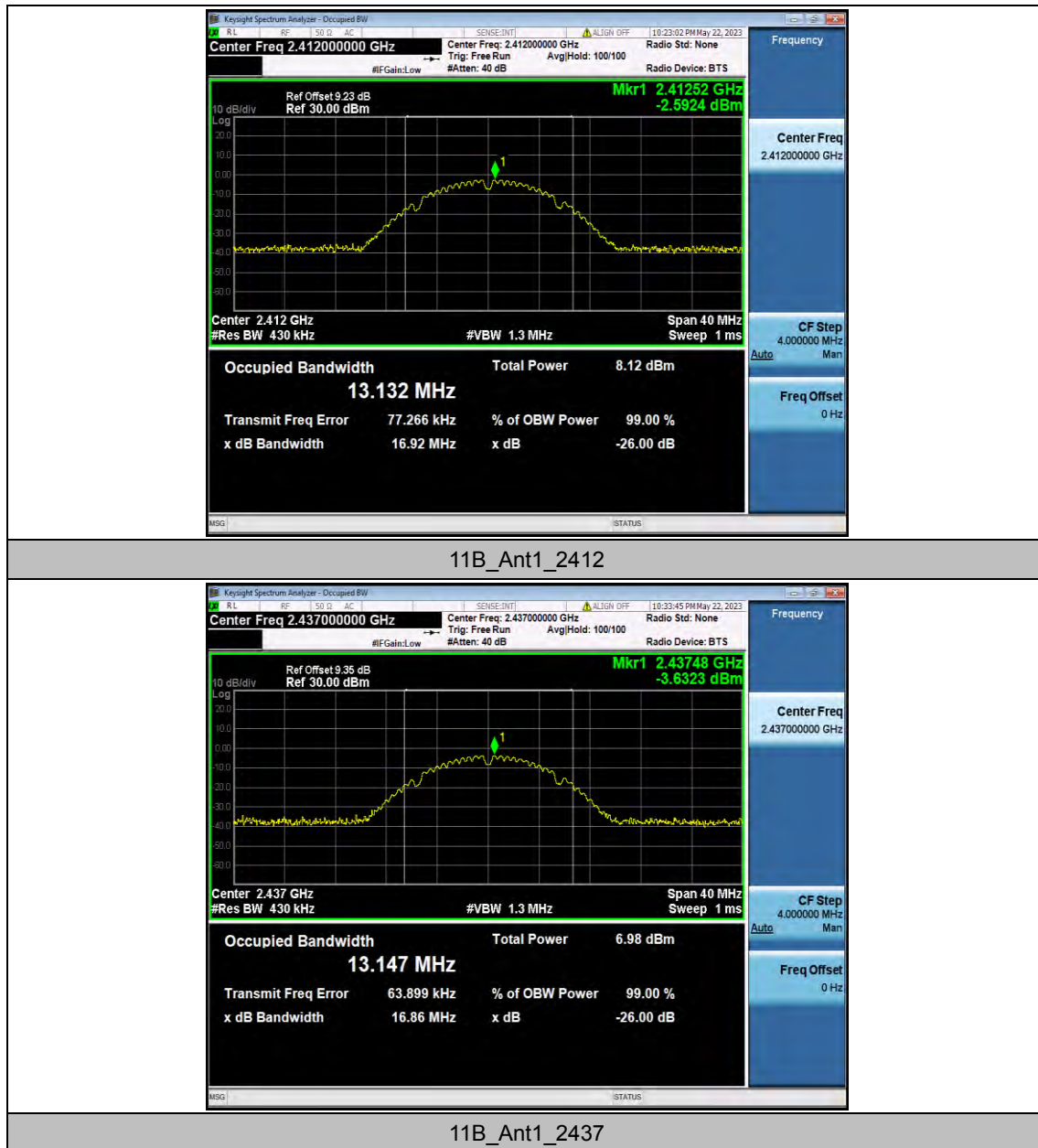
11N40SISO_Ant1_2452

Appendix A.2: Occupied Channel Bandwidth

Test Result

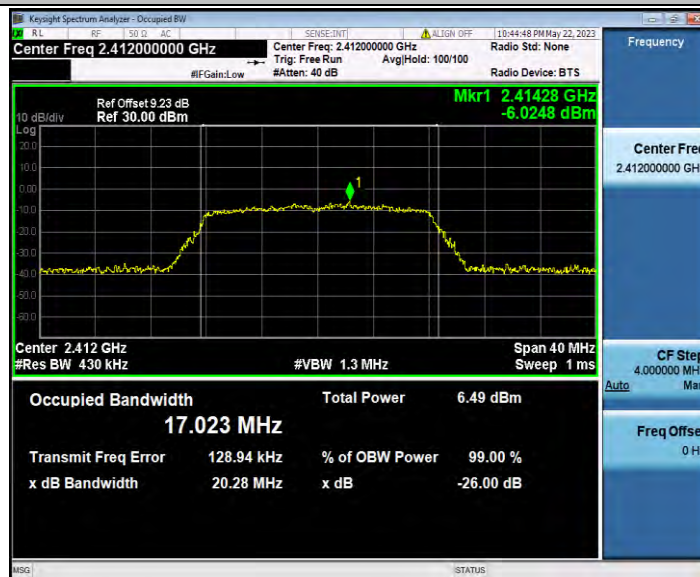
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.132	2405.511	2418.643	---	---
		2437	13.147	2430.490	2443.637	---	---
		2462	13.086	2455.504	2468.590	---	---
11G	Ant1	2412	17.023	2403.617	2420.640	---	---
		2437	16.921	2428.632	2445.553	---	---
		2462	16.915	2453.558	2470.473	---	---
11N20SISO	Ant1	2412	17.979	2403.082	2421.061	---	---
		2437	17.923	2428.071	2445.994	---	---
		2462	17.975	2453.045	2471.020	---	---
11N40SISO	Ant1	2422	36.537	2403.953	2440.490	---	---
		2437	36.401	2418.975	2455.376	---	---
		2452	36.326	2433.901	2470.227	---	---

Test Graphs

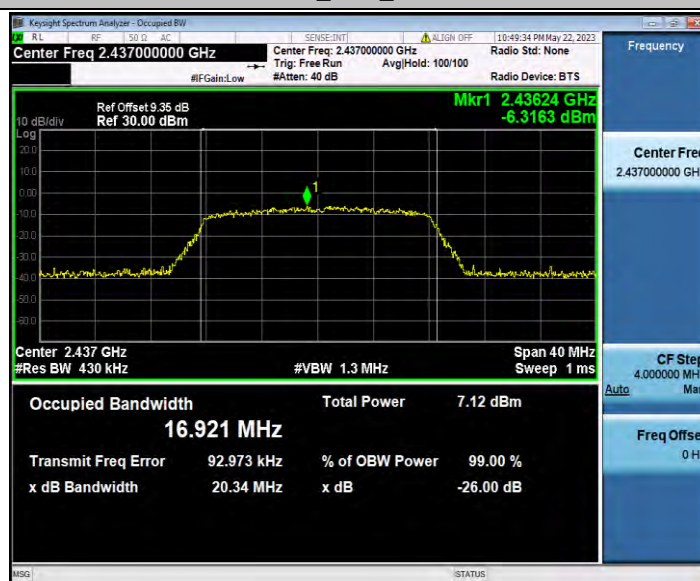




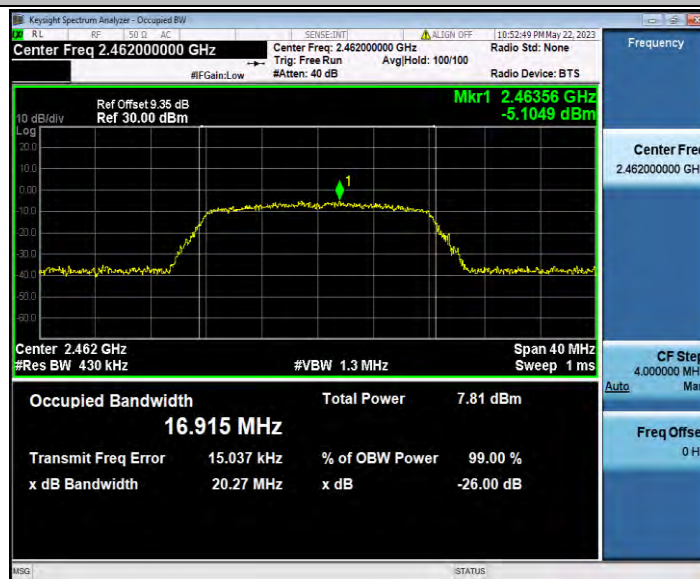
11B_Ant1_2462



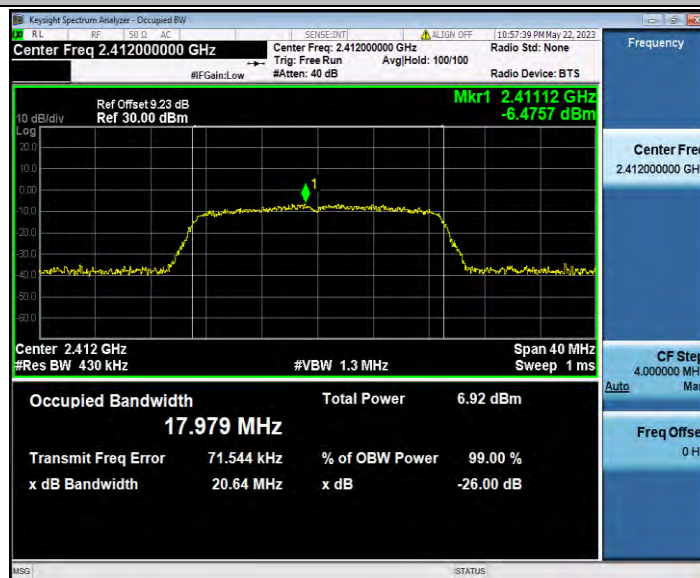
11G_Ant1_2412



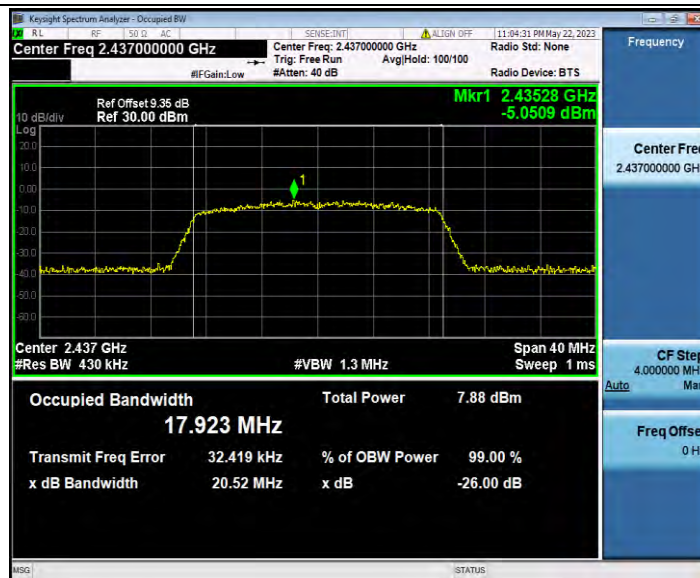
11G_Ant1_2437



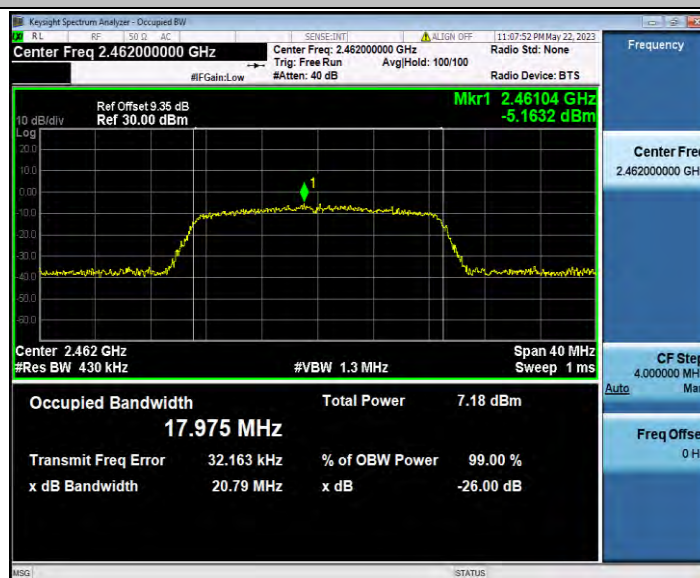
11G_Ant1_2462



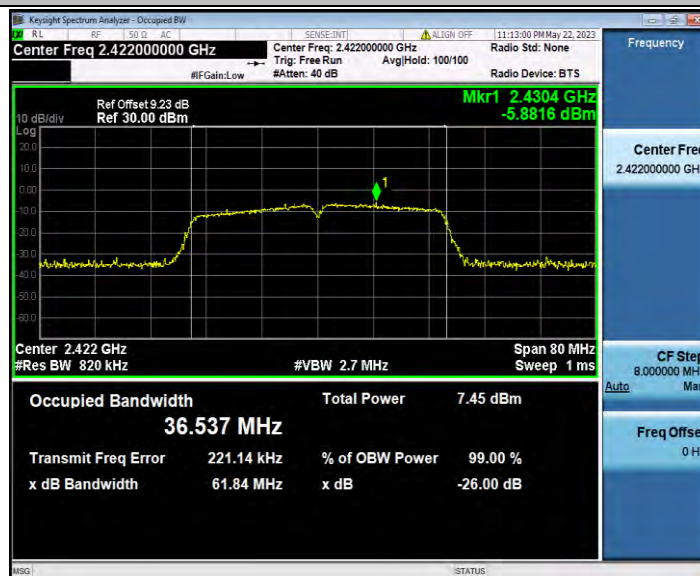
11N20SISO_Ant1_2412



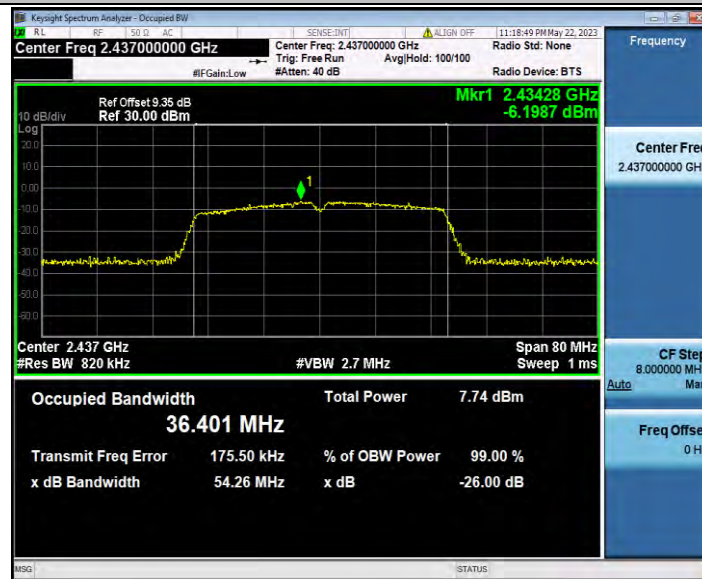
11N20SISO_Ant1_2437



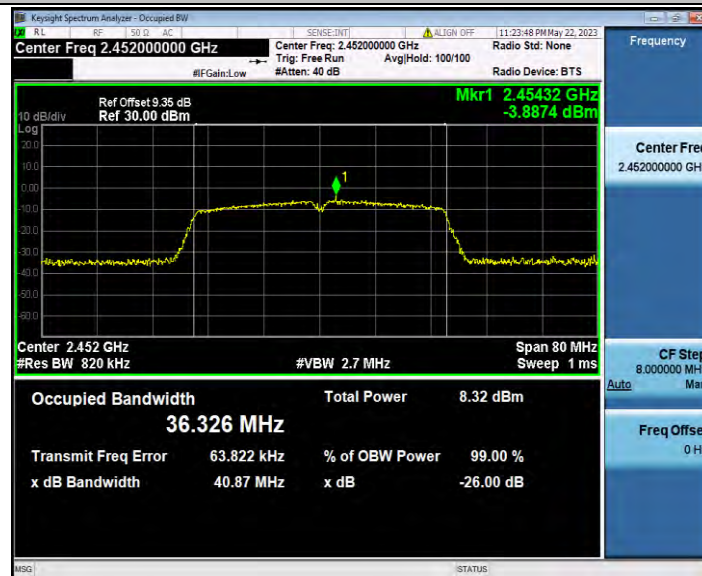
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix A.3: Maximum conducted output power

Test Result Peak

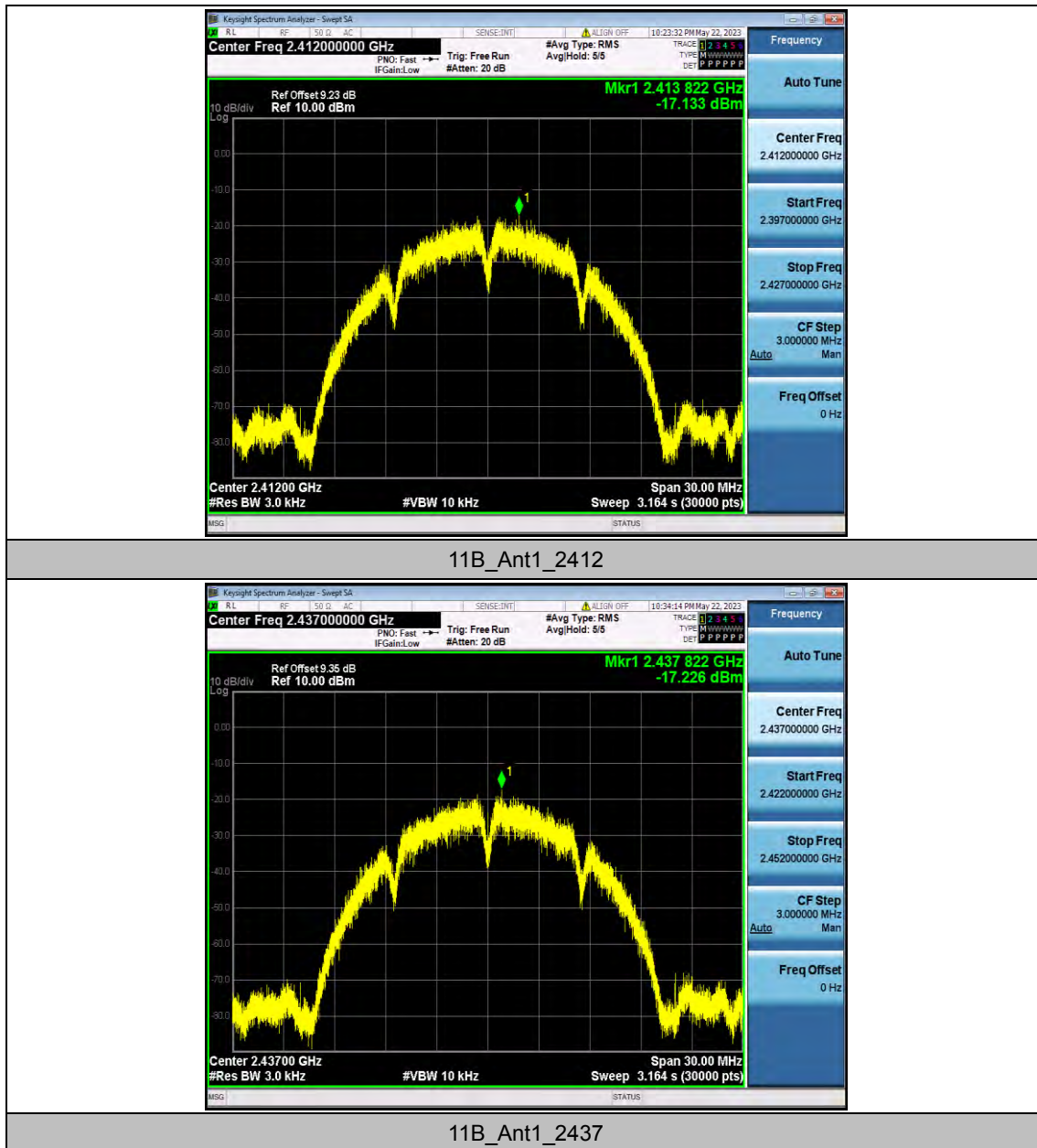
TestMode	Antenna	Frequency[MHz]	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	8.19	≤30.00	PASS
		2437	8.06	≤30.00	PASS
		2462	8.63	≤30.00	PASS
11G	Ant1	2412	8.72	≤30.00	PASS
		2437	8.41	≤30.00	PASS
		2462	8.99	≤30.00	PASS
11N20SISO	Ant1	2412	8.08	≤30.00	PASS
		2437	8.02	≤30.00	PASS
		2462	8.42	≤30.00	PASS
11N40SISO	Ant1	2422	8.78	≤30.00	PASS
		2437	8.14	≤30.00	PASS
		2452	8.71	≤30.00	PASS

Appendix A.4: Maximum power spectral density

Test Result

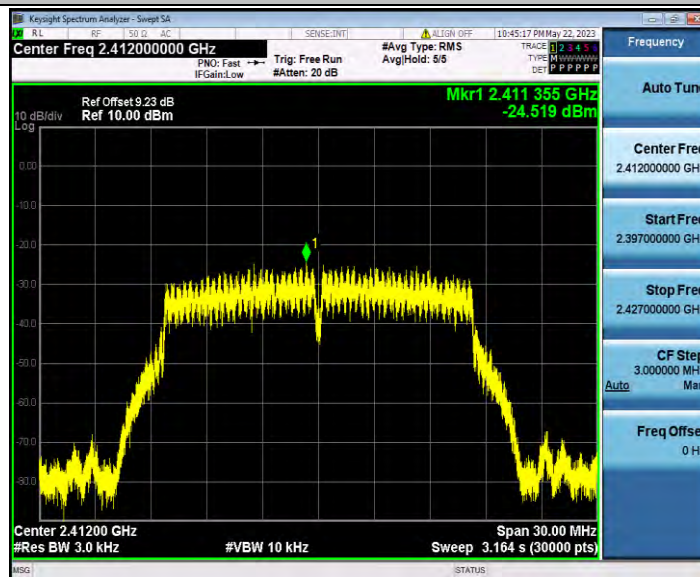
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-17.13	≤8.00	PASS
		2437	-17.23	≤8.00	PASS
		2462	-17.73	≤8.00	PASS
11G	Ant1	2412	-24.52	≤8.00	PASS
		2437	-23.07	≤8.00	PASS
		2462	-21.17	≤8.00	PASS
11N20SISO	Ant1	2412	-24.65	≤8.00	PASS
		2437	-22.86	≤8.00	PASS
		2462	-21.48	≤8.00	PASS
11N40SISO	Ant1	2422	-24.78	≤8.00	PASS
		2437	-23.31	≤8.00	PASS
		2452	-22.58	≤8.00	PASS

Test Graphs

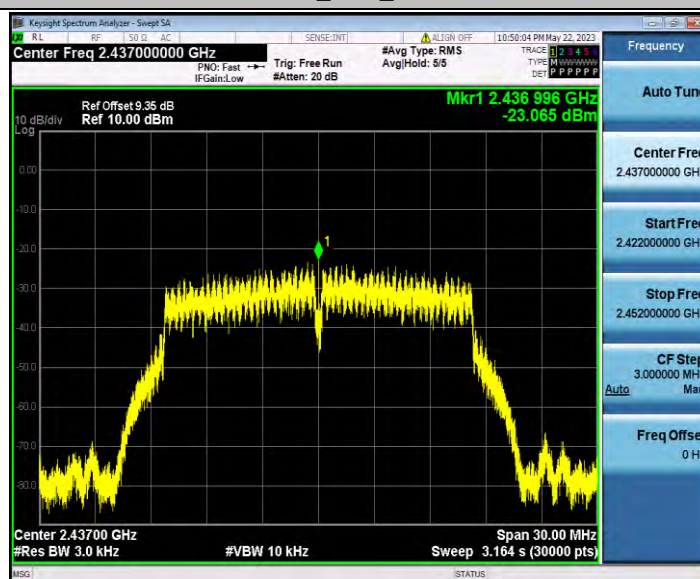




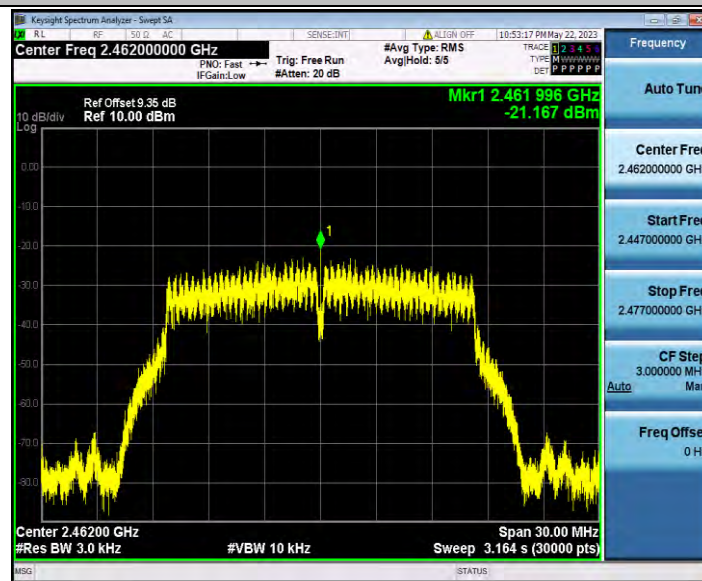
11B_Ant1_2462



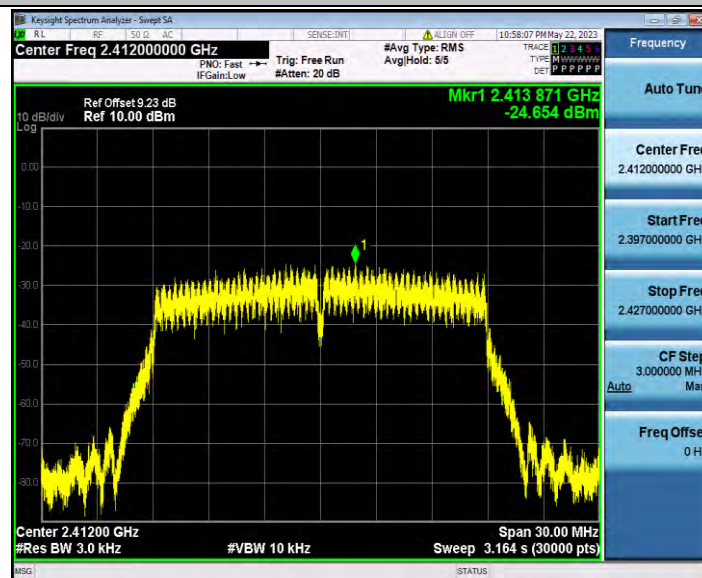
11G_Ant1_2412



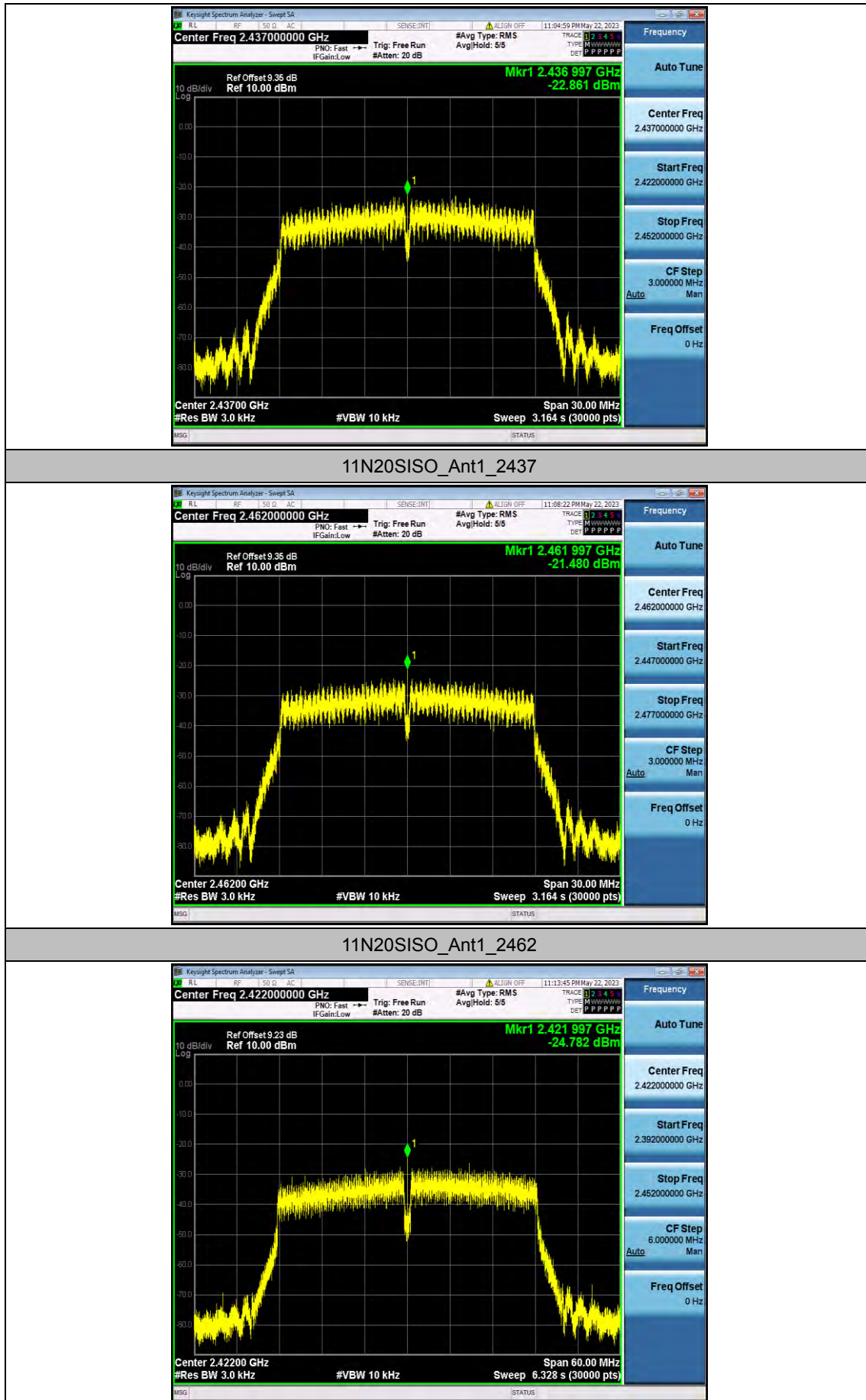
11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



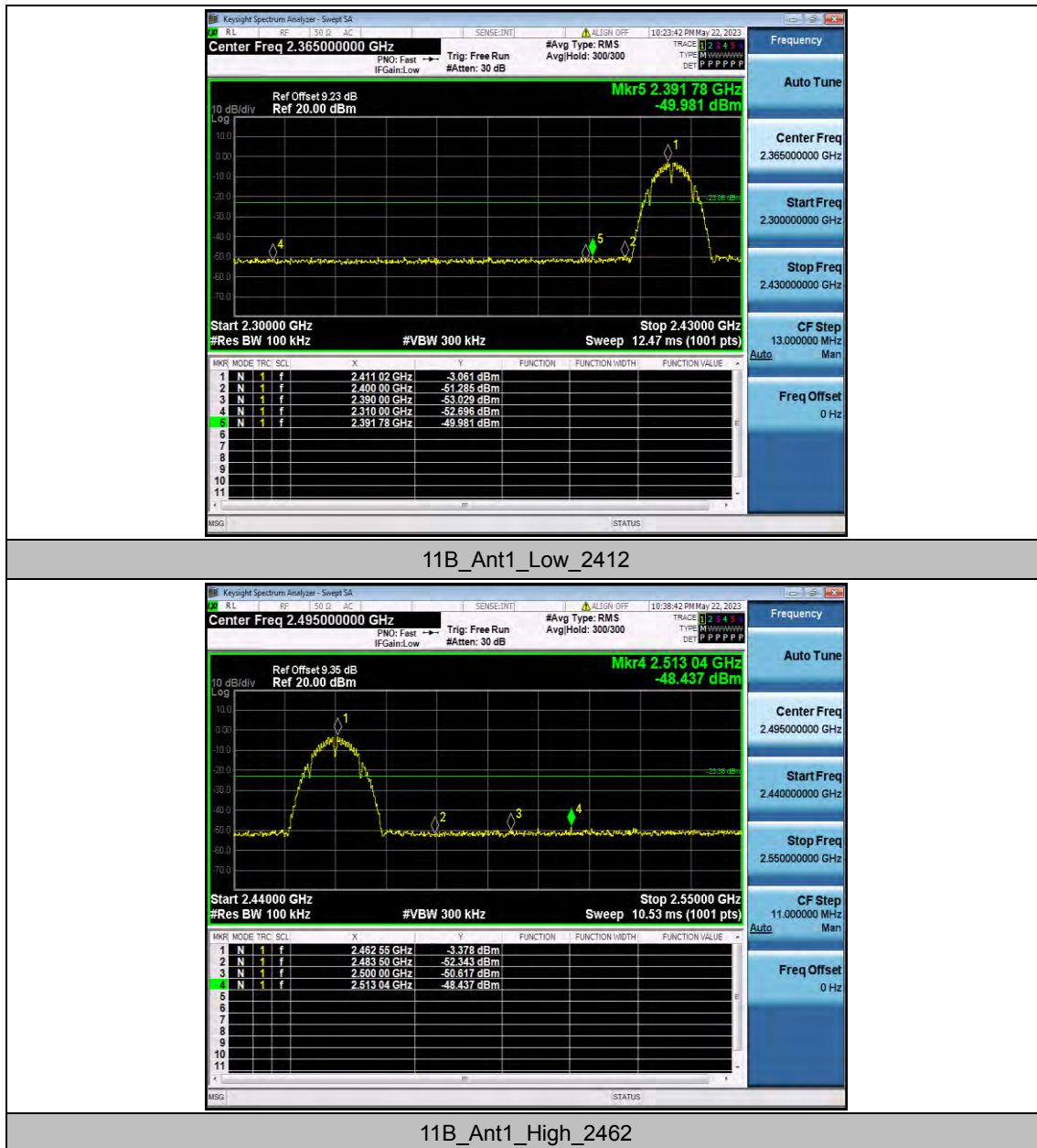
11N40SISO_Ant1_2452

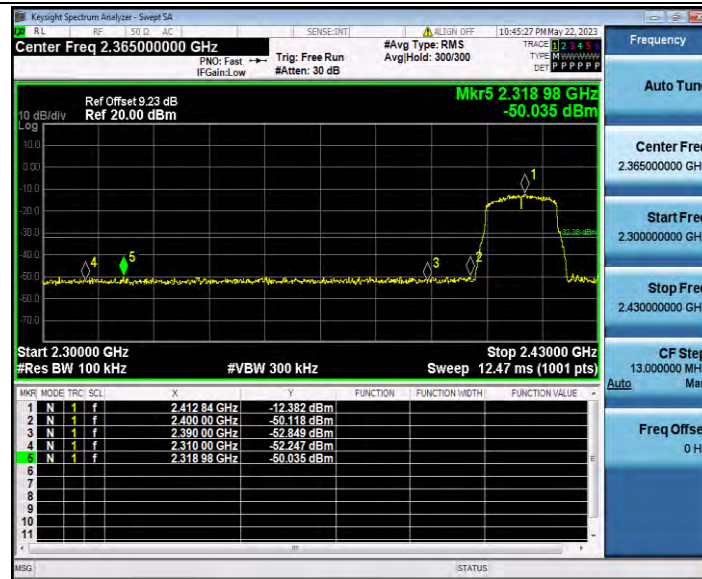
Appendix A.5: Band edge measurements

Test Result

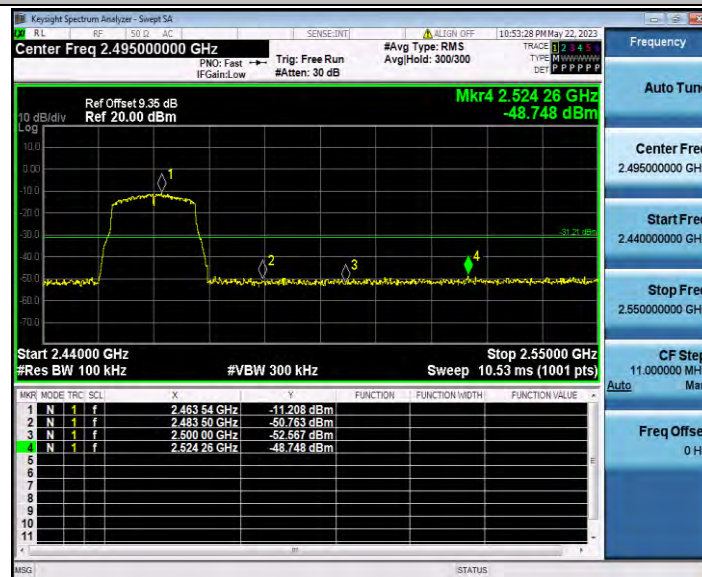
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-3.06	-49.98	≤ -23.06	PASS
		High	2462	-3.38	-48.44	≤ -23.38	PASS
11G	Ant1	Low	2412	-12.38	-50.04	≤ -32.38	PASS
		High	2462	-11.21	-48.75	≤ -31.21	PASS
11N20SISO	Ant1	Low	2412	-12.63	-49.44	≤ -32.63	PASS
		High	2462	-11.75	-47.43	≤ -31.75	PASS
11N40SISO	Ant1	Low	2422	-15.51	-49.66	≤ -35.51	PASS
		High	2452	-14.75	-48.21	≤ -34.75	PASS

Test Graphs

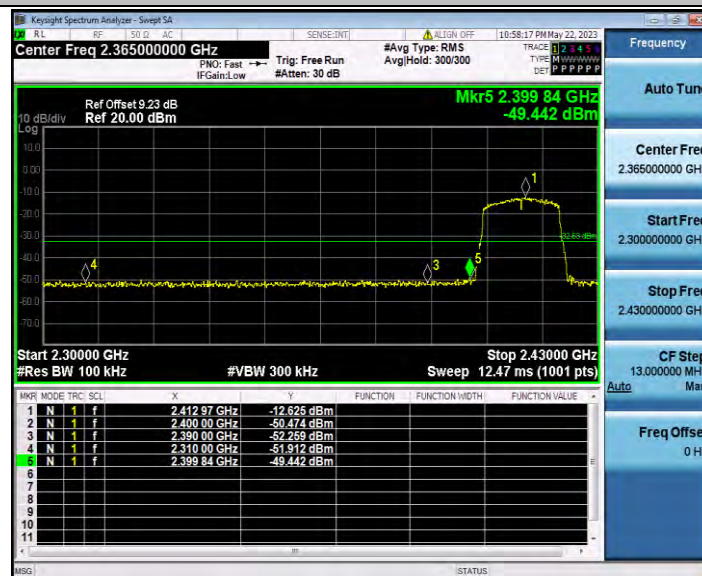




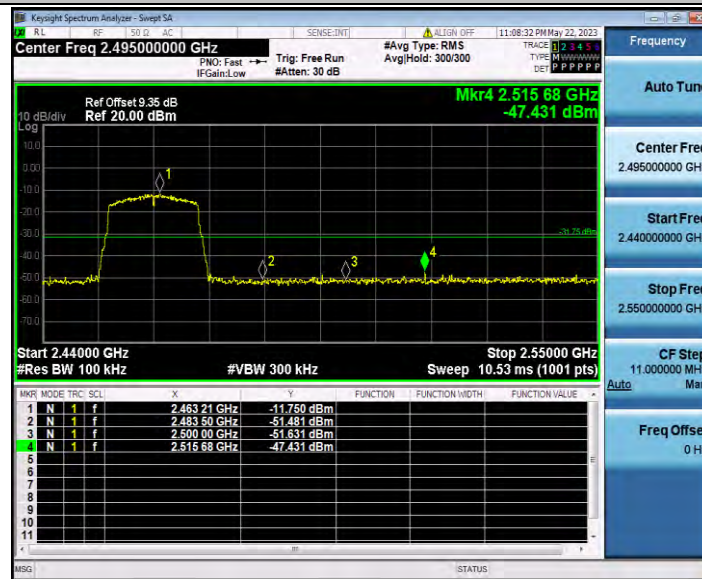
11G_Ant1_Low_2412



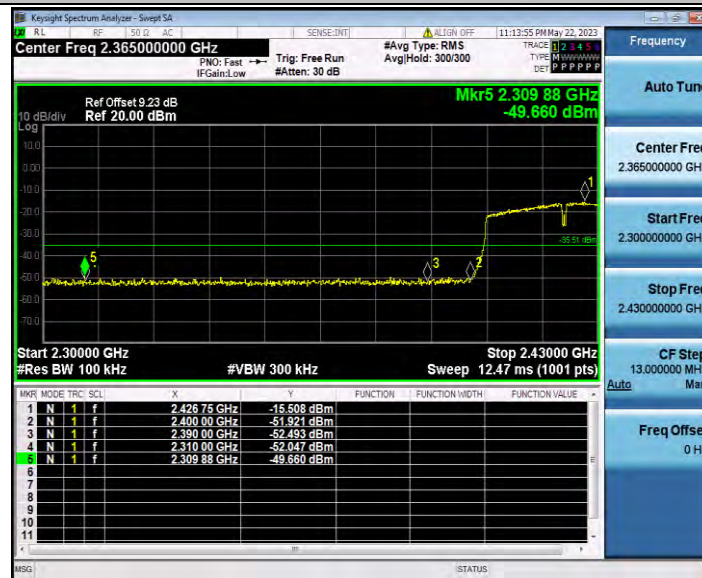
11G_Ant1_High_2462



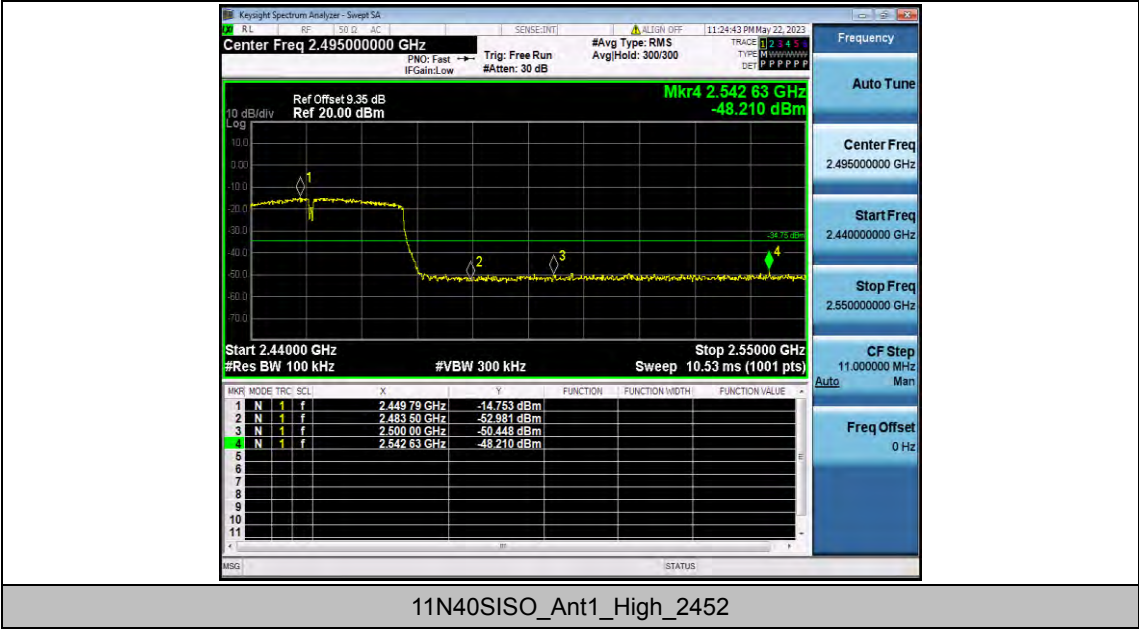
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422

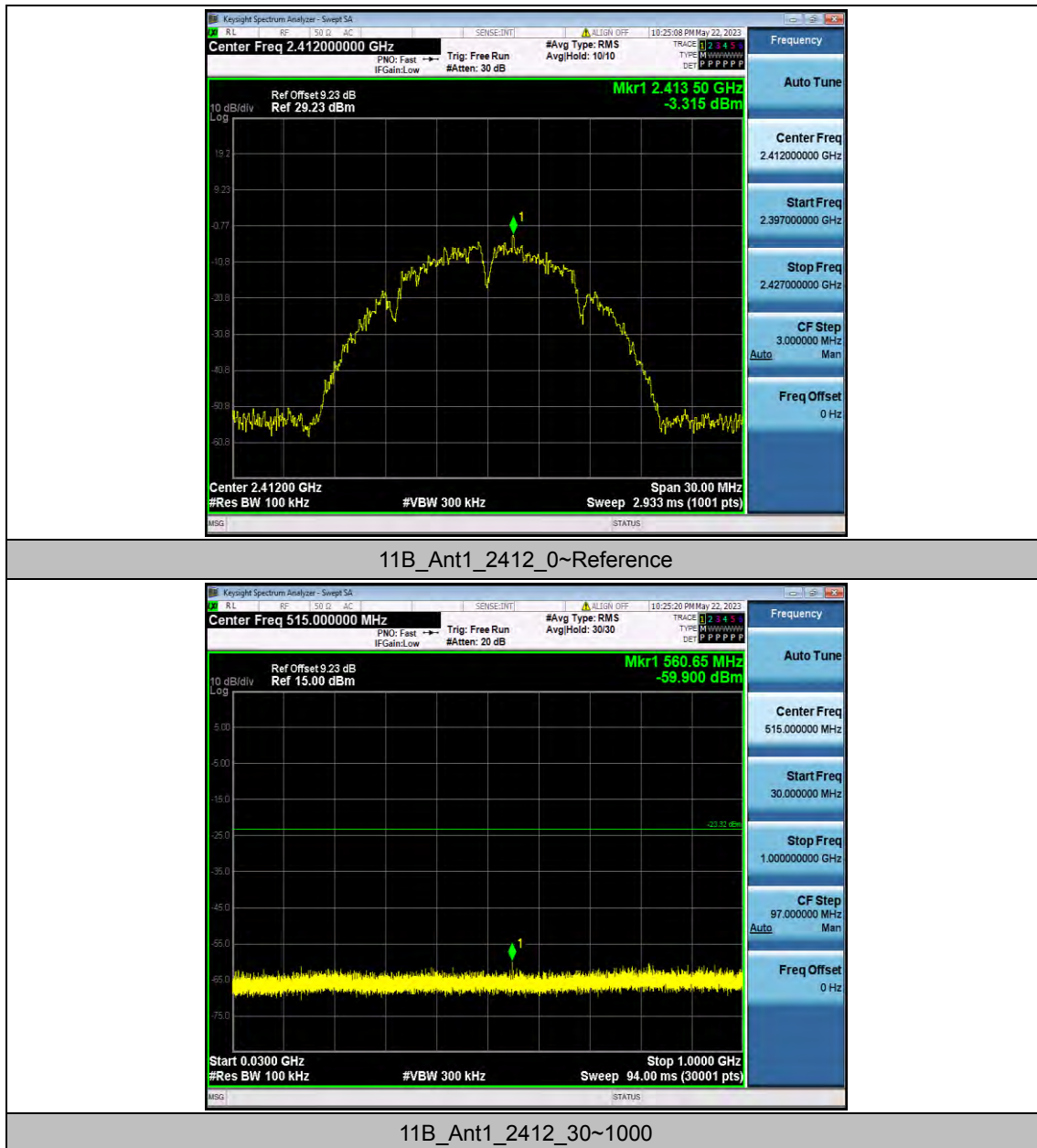


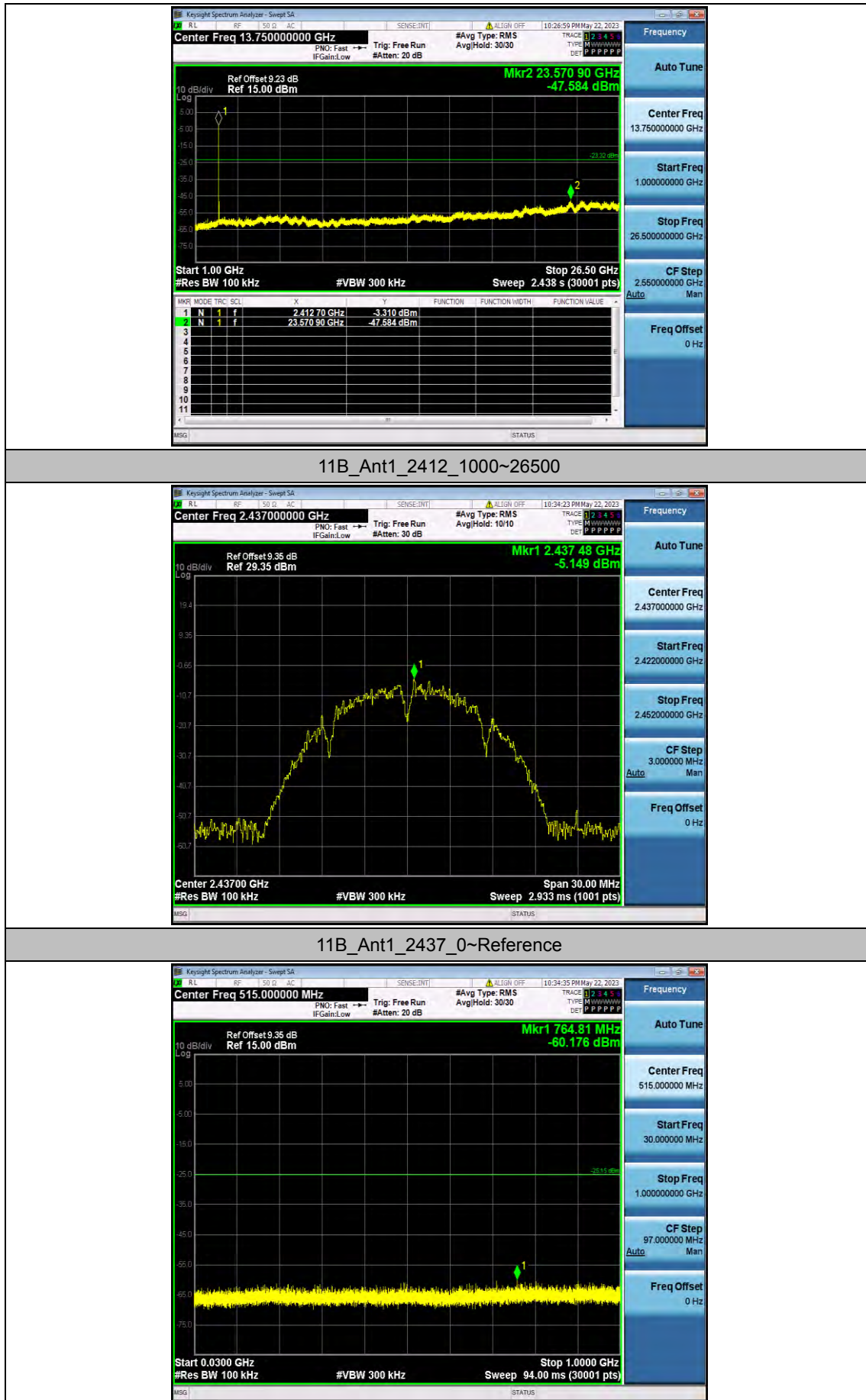
Appendix A.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-3.32	-3.32	---	PASS
			30~1000	-3.32	-59.9	≤ -23.32	PASS
			1000~26500	-3.32	-47.58	≤ -23.32	PASS
		2437	Reference	-5.15	-5.15	---	PASS
			30~1000	-5.15	-60.18	≤ -25.15	PASS
			1000~26500	-5.15	-47.06	≤ -25.15	PASS
		2462	Reference	-5.17	-5.17	---	PASS
			30~1000	-5.17	-60.41	≤ -25.17	PASS
			1000~26500	-5.17	-47.01	≤ -25.17	PASS
11G	Ant1	2412	Reference	-13.46	-13.46	---	PASS
			30~1000	-13.46	-60.39	≤ -33.46	PASS
			1000~26500	-13.46	-47.41	≤ -33.46	PASS
		2437	Reference	-12.72	-12.72	---	PASS
			30~1000	-12.72	-60	≤ -32.72	PASS
			1000~26500	-12.72	-47.34	≤ -32.72	PASS
		2462	Reference	-11.46	-11.46	---	PASS
			30~1000	-11.46	-59.4	≤ -31.46	PASS
			1000~26500	-11.46	-47.08	≤ -31.46	PASS
11N20SISO	Ant1	2412	Reference	-13.38	-13.38	---	PASS
			30~1000	-13.38	-59.99	≤ -33.38	PASS
			1000~26500	-13.38	-47.53	≤ -33.38	PASS
		2437	Reference	-12.04	-12.04	---	PASS
			30~1000	-12.04	-60.54	≤ -32.04	PASS
			1000~26500	-12.04	-46.63	≤ -32.04	PASS
		2462	Reference	-12.73	-12.73	---	PASS
			30~1000	-12.73	-59.68	≤ -32.73	PASS
			1000~26500	-12.73	-47.56	≤ -32.73	PASS
11N40SISO	Ant1	2422	Reference	-16.48	-16.48	---	PASS
			30~1000	-16.48	-60.4	≤ -36.48	PASS
			1000~26500	-16.48	-47.42	≤ -36.48	PASS
		2437	Reference	-16.19	-16.19	---	PASS
			30~1000	-16.19	-60.63	≤ -36.19	PASS
			1000~26500	-16.19	-47.53	≤ -36.19	PASS
		2452	Reference	-14.96	-14.96	---	PASS
			30~1000	-14.96	-48.89	≤ -34.96	PASS
			1000~26500	-14.96	-47.94	≤ -34.96	PASS

Test Graphs





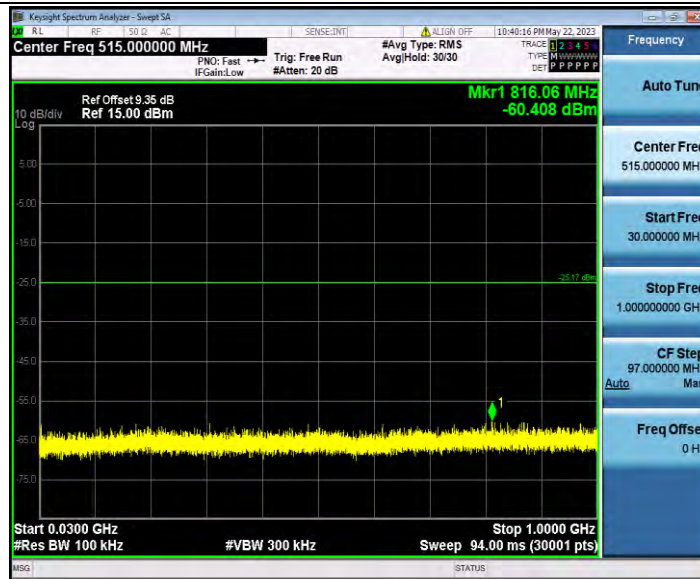
11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



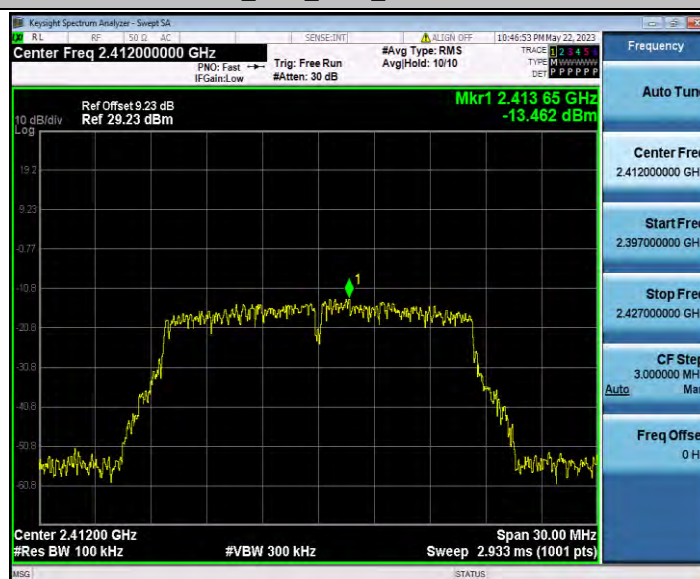
11B_Ant1_2462_0~Reference



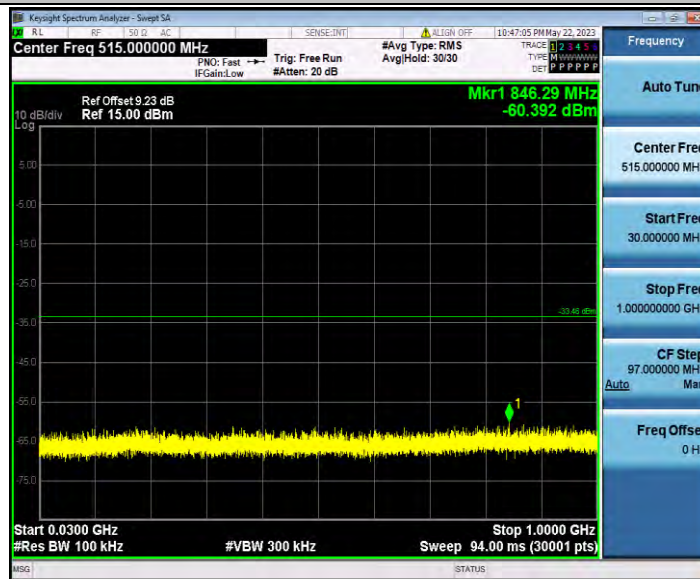
11B_Ant1_2462_30~1000



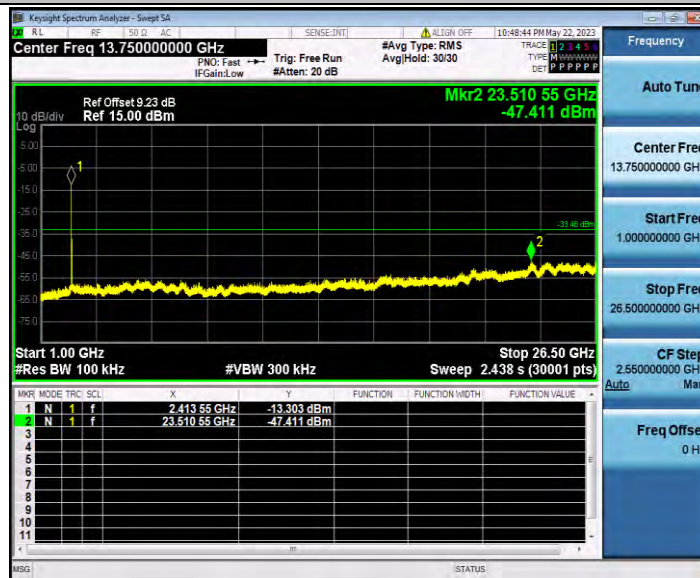
11B_Ant1_2462_1000~26500



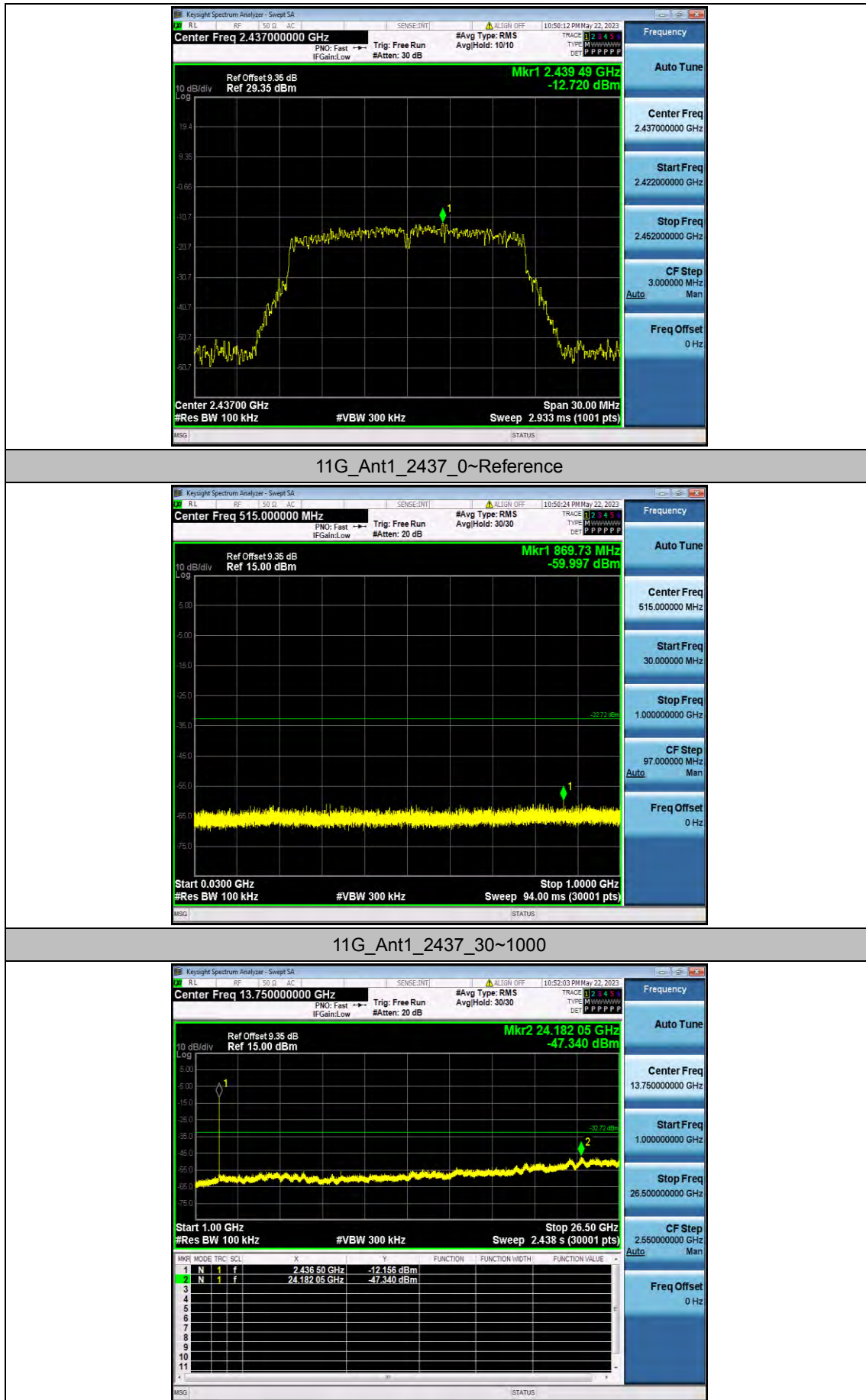
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



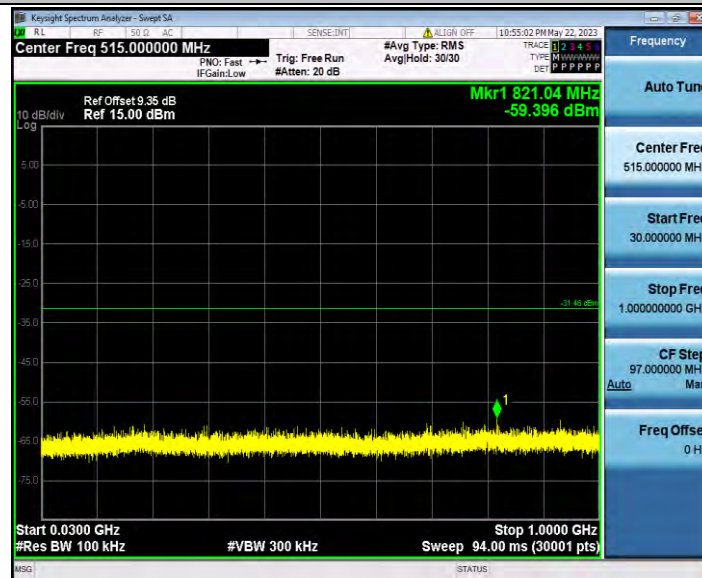
11G_Ant1_2412_1000~26500



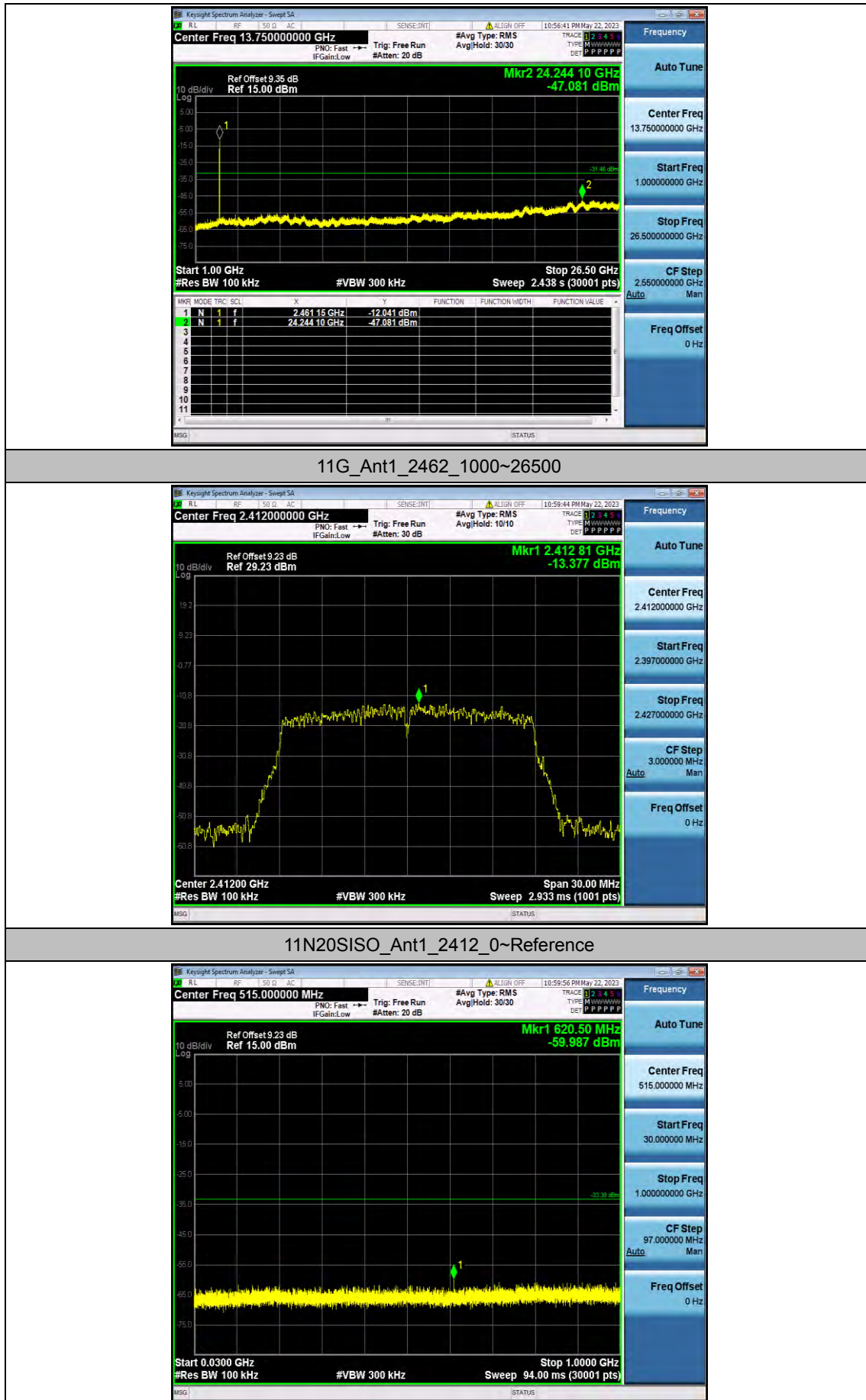
11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



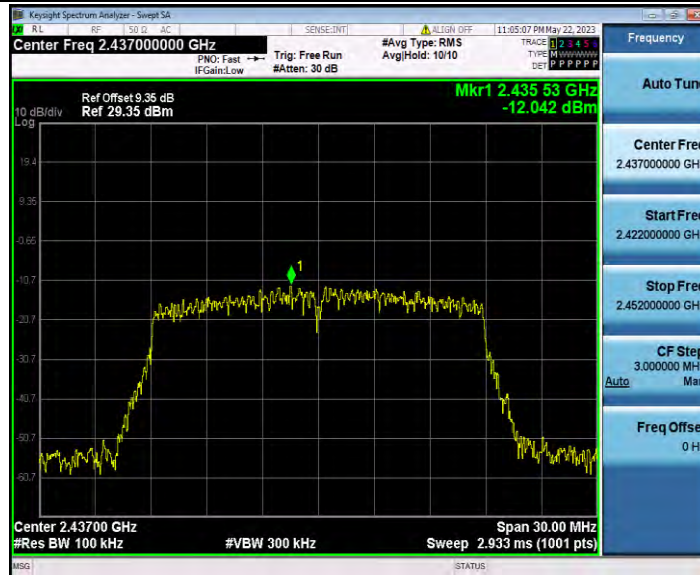
11G_Ant1_2462_30~1000



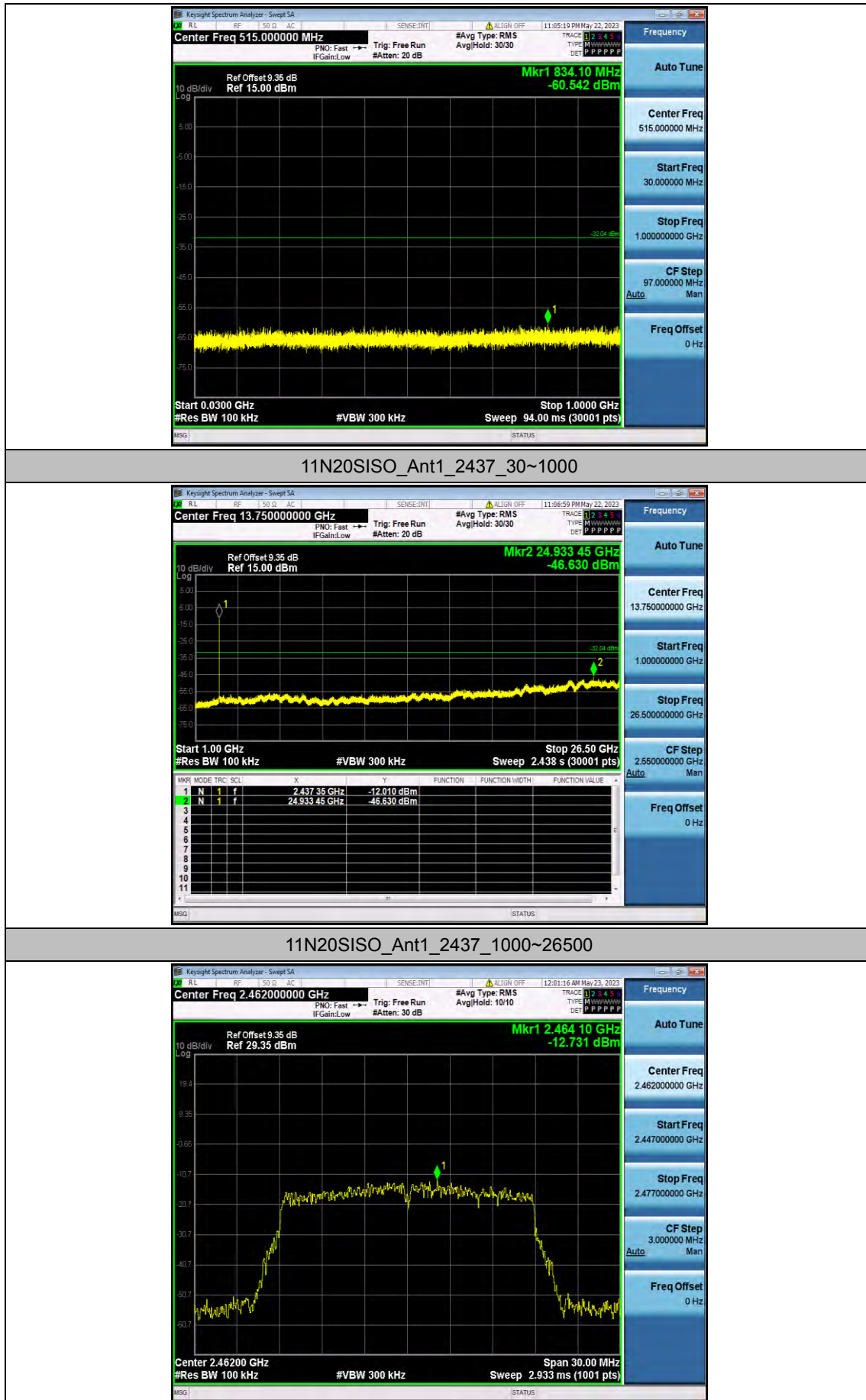
11N20SISO_Ant1_2412_30~1000



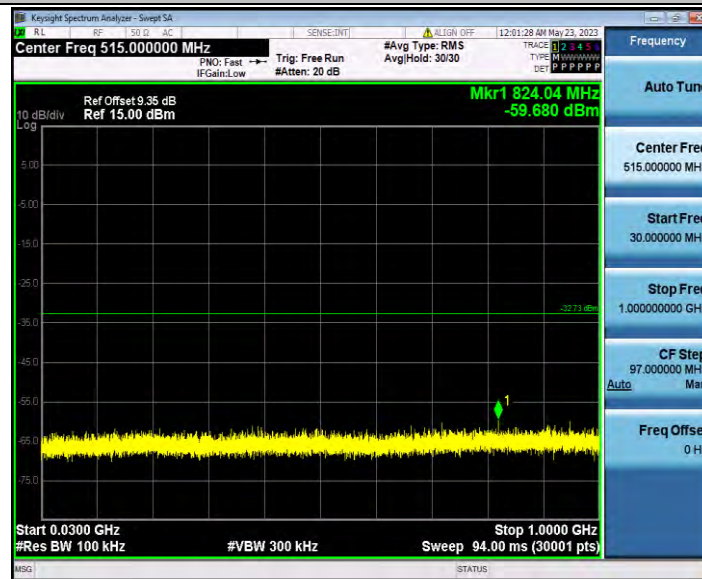
11N20SISO_Ant1_2412_1000~26500



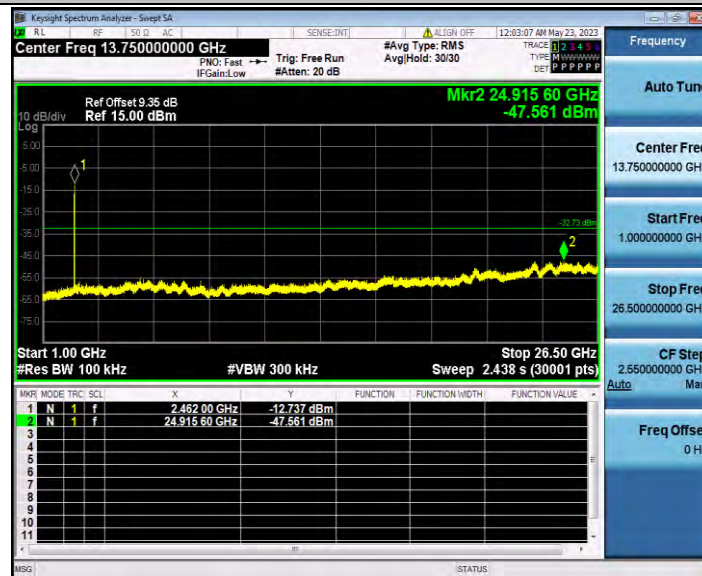
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2462_0~Reference



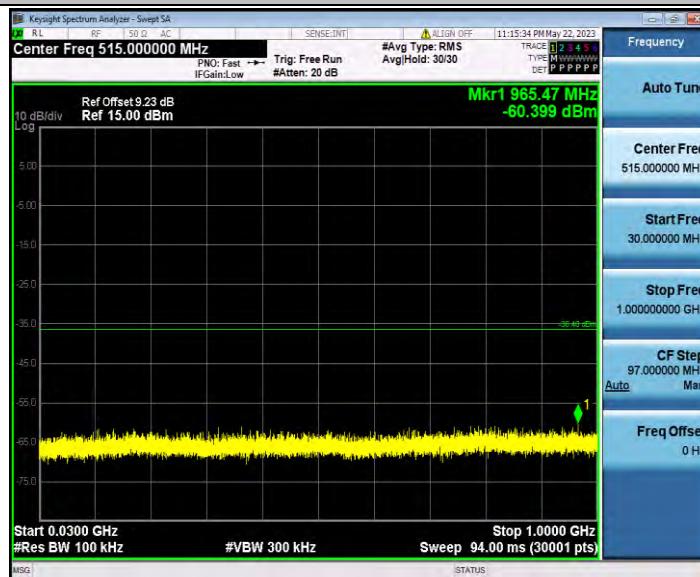
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



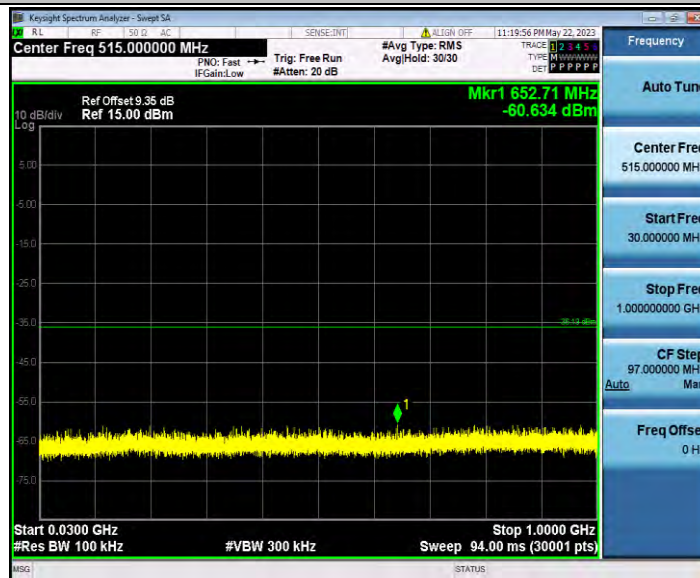
11N40SISO_Ant1_2422_30~1000



11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference



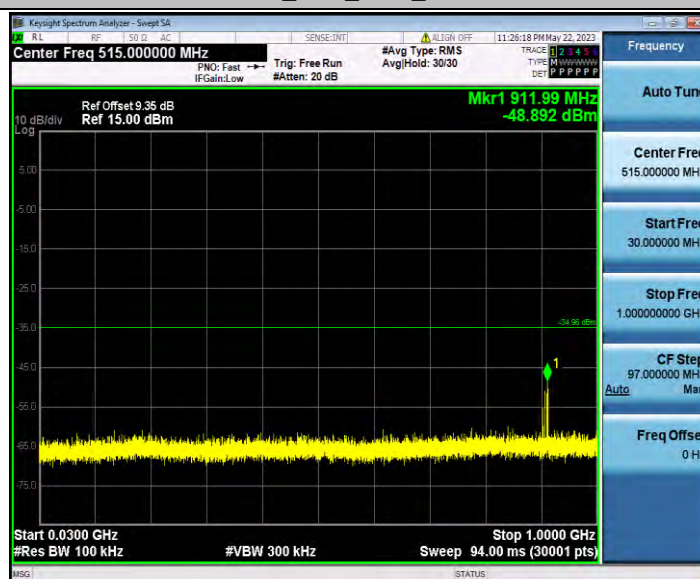
11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference





Appendix A.7: Emissions in Restricted Bands

Test Result

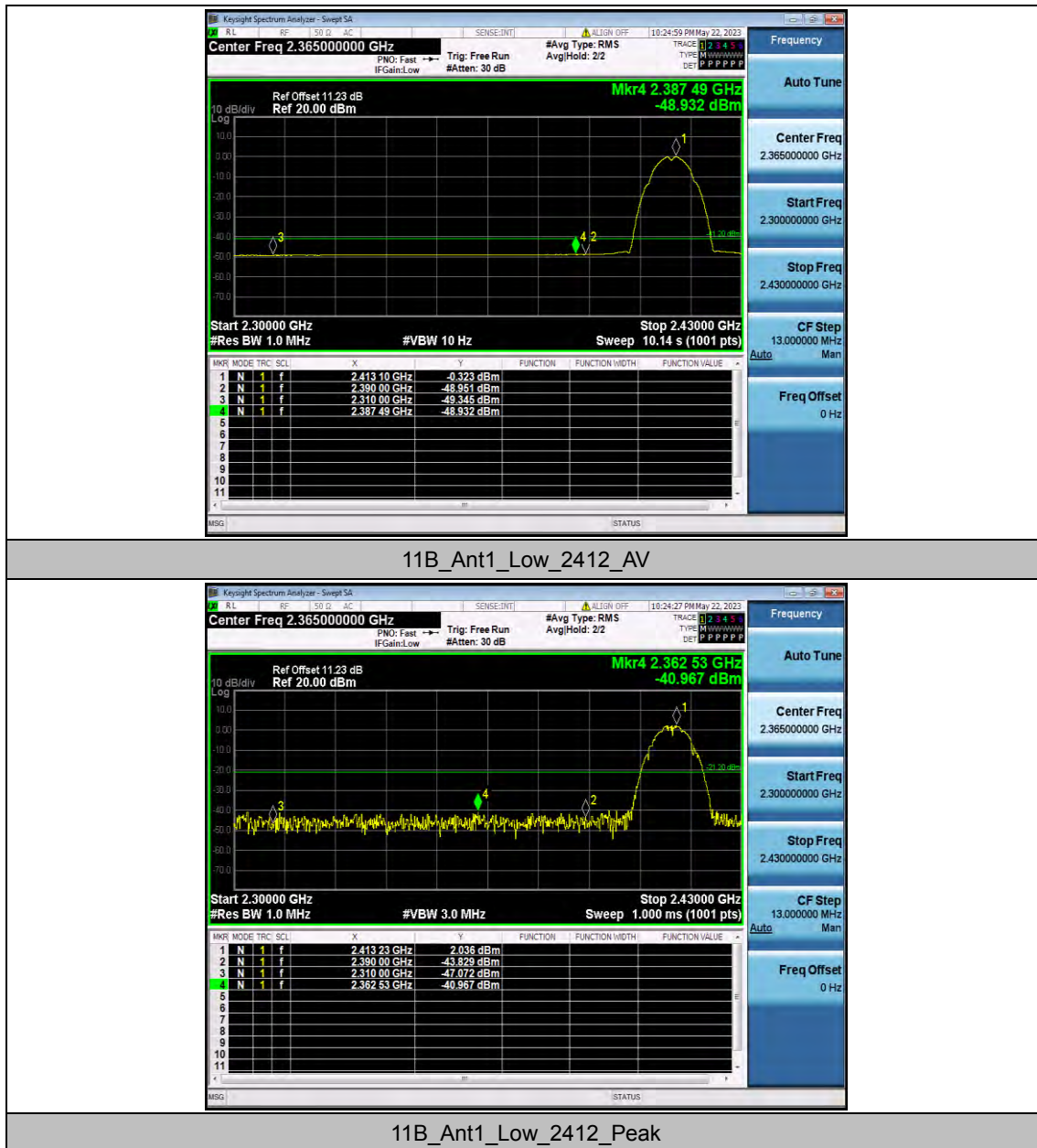
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.35	≤-41.20	45.85	≤54	PASS
				AV	2387.490	-48.93	≤-41.20	46.27	≤54	PASS
				AV	2390.000	-48.95	≤-41.20	46.25	≤54	PASS
				Peak	2310.000	-47.07	≤-21.20	48.13	≤74	PASS
				Peak	2362.530	-40.97	≤-21.20	54.23	≤74	PASS
				Peak	2390.000	-43.83	≤-21.20	51.37	≤74	PASS
		High	2462	AV	2483.500	-48.8	≤-41.20	46.40	≤54	PASS
				AV	2499.950	-48.52	≤-41.20	46.68	≤54	PASS
				AV	2500.000	-48.52	≤-41.20	46.68	≤54	PASS
				Peak	2483.500	-47.33	≤-21.20	47.87	≤74	PASS
				Peak	2494.340	-41.2	≤-21.20	54.00	≤74	PASS
				Peak	2500.000	-45.52	≤-21.20	49.68	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.27	≤-41.20	45.93	≤54	PASS
				AV	2386.060	-48.72	≤-41.20	46.48	≤54	PASS
				AV	2390.000	-48.82	≤-41.20	46.38	≤54	PASS
				Peak	2310.000	-45.81	≤-21.20	49.39	≤74	PASS
				Peak	2345.760	-39.83	≤-21.20	55.37	≤74	PASS
				Peak	2390.000	-44.18	≤-21.20	51.02	≤74	PASS
		High	2462	AV	2483.500	-48.67	≤-41.20	46.53	≤54	PASS
				AV	2499.510	-48.47	≤-41.20	46.73	≤54	PASS
				AV	2500.000	-48.5	≤-41.20	46.70	≤54	PASS
				Peak	2483.500	-41.63	≤-21.20	53.57	≤74	PASS
				Peak	2485.320	-40.7	≤-21.20	54.50	≤74	PASS
				Peak	2500.000	-45.08	≤-21.20	50.12	≤74	PASS
11N20SISO	Ant1	Low	2412	AV	2310.000	-49.23	≤-41.20	45.97	≤54	PASS
				AV	2386.060	-48.73	≤-41.20	46.47	≤54	PASS
				AV	2390.000	-48.81	≤-41.20	46.39	≤54	PASS
				Peak	2310.000	-46.38	≤-21.20	48.82	≤74	PASS
				Peak	2377.220	-40.35	≤-21.20	54.85	≤74	PASS
				Peak	2390.000	-47.44	≤-21.20	47.76	≤74	PASS
		High	2462	AV	2483.500	-48.8	≤-41.20	46.40	≤54	PASS
				AV	2499.620	-48.61	≤-41.20	46.59	≤54	PASS
				AV	2500.000	-48.61	≤-41.20	46.59	≤54	PASS
				Peak	2483.500	-44.32	≤-21.20	50.88	≤74	PASS
				Peak	2495.770	-41.01	≤-21.20	54.19	≤74	PASS
				Peak	2500.000	-42.51	≤-21.20	52.69	≤74	PASS

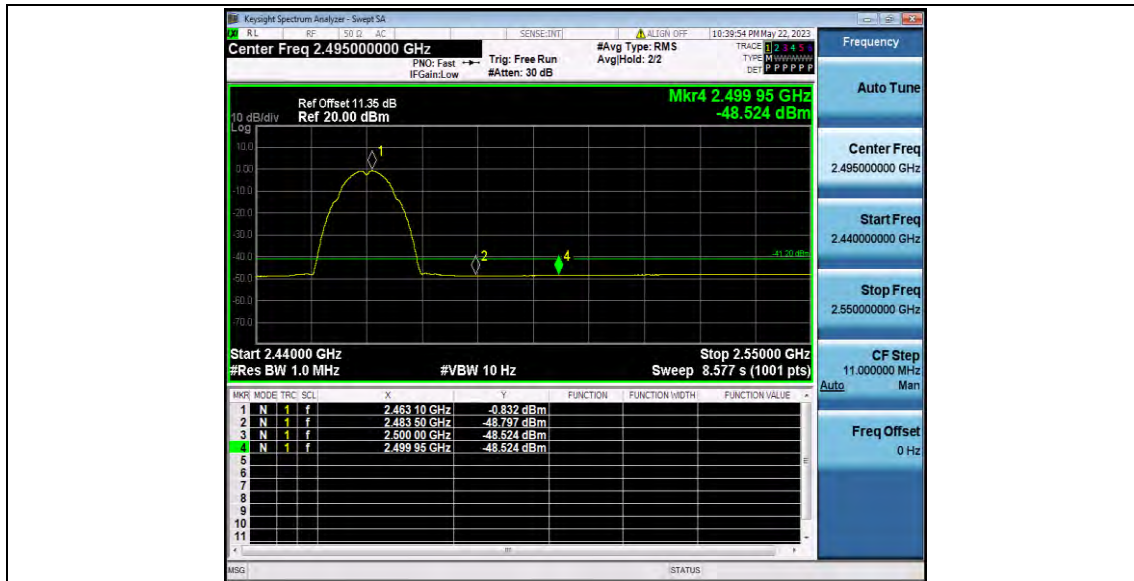
11N40SIS O	Ant1	Low	2422	AV	2310.000	-49.36	≤ -41.20	45.84	≤ 54	PASS
				AV	2389.440	-48.89	≤ -41.20	46.31	≤ 54	PASS
				AV	2390.000	-48.9	≤ -41.20	46.30	≤ 54	PASS
				Peak	2310.000	-46.34	≤ -21.20	48.86	≤ 74	PASS
				Peak	2371.760	-40.03	≤ -21.20	55.17	≤ 74	PASS
				Peak	2390.000	-44.19	≤ -21.20	51.01	≤ 74	PASS
		High	2452	AV	2483.500	-48.69	≤ -41.20	46.51	≤ 54	PASS
				AV	2499.950	-48.55	≤ -41.20	46.65	≤ 54	PASS
				AV	2500.000	-48.55	≤ -41.20	46.65	≤ 54	PASS
				Peak	2483.500	-44.9	≤ -21.20	50.30	≤ 74	PASS
				Peak	2487.960	-40.58	≤ -21.20	54.62	≤ 74	PASS
				Peak	2500.000	-47.75	≤ -21.20	47.45	≤ 74	PASS

Note:

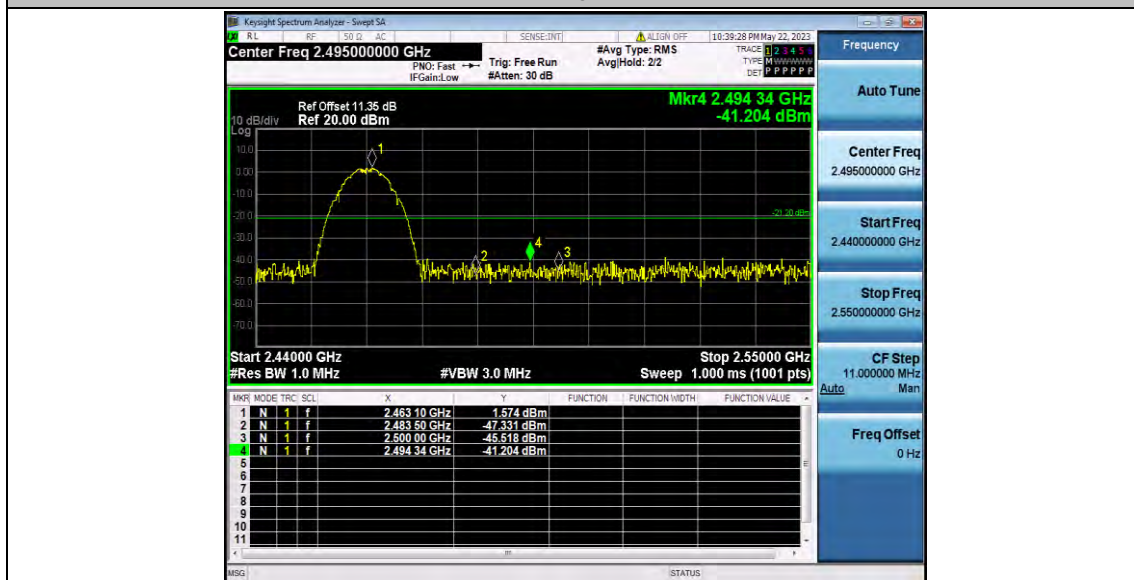
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

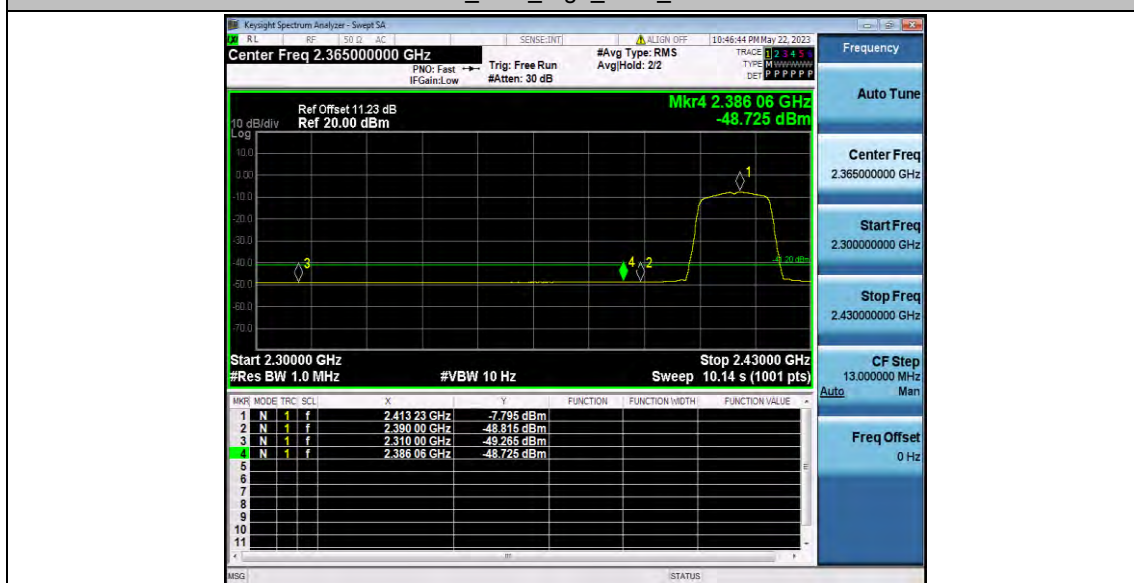




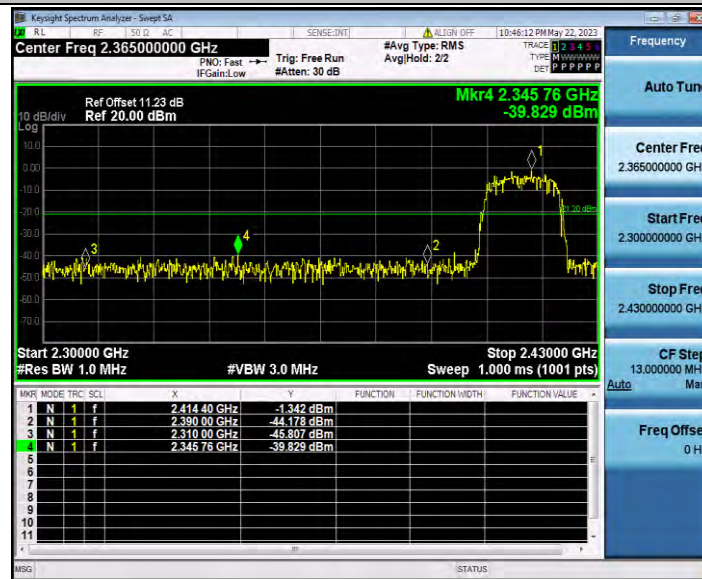
11B_Ant1_High_2462_AV



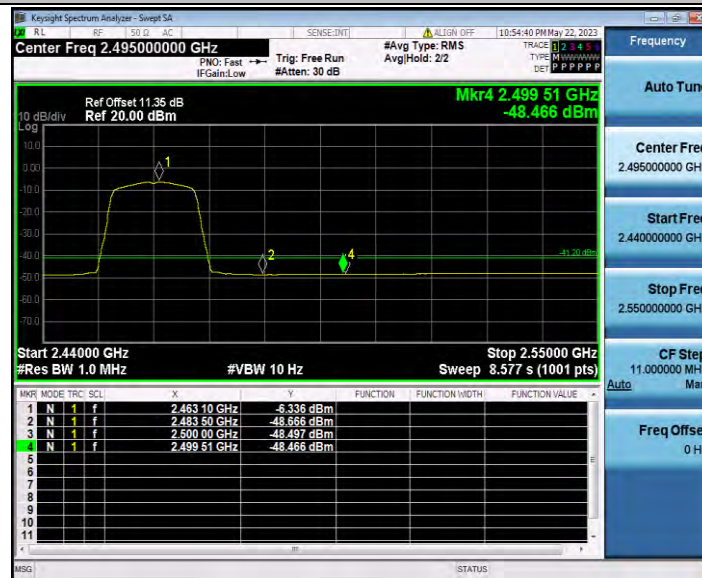
11B_Ant1_High_2462_Peak



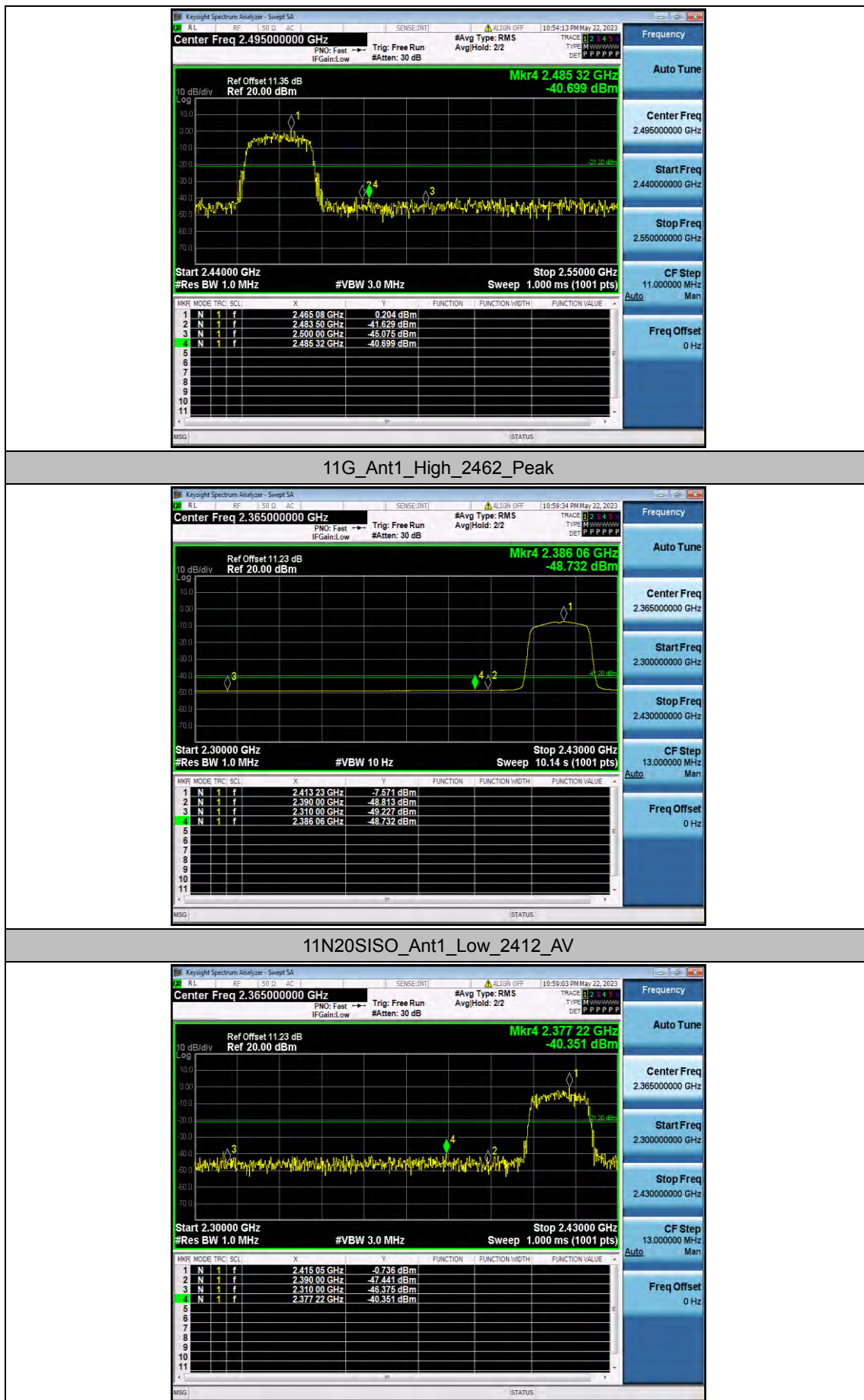
11G_Ant1_Low_2412_AV



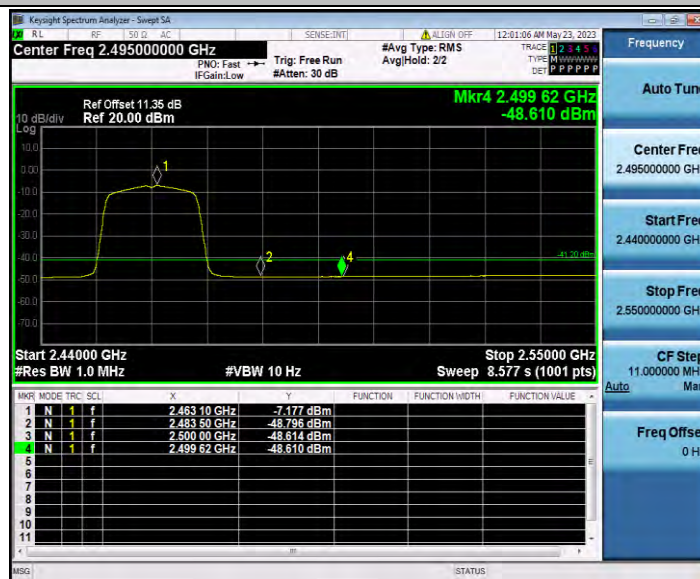
11G_Ant1_Low_2412_Peak



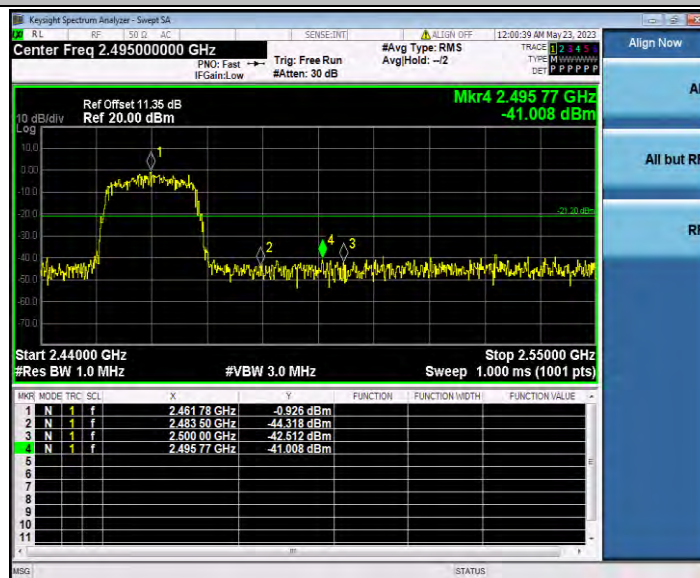
11G_Ant1_High_2462_AV



11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



11N20SISO_Ant1_High_2462_Peak

